

SYLLOGE FUNGORUM

OMNIUM HUCUSQUE COGNITORUM

DIGESSIT

P. A. SACCARDO

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Sectio I



SUPPLEMENTUM UNIVERSALE

Pars X

Phycomycetæ, Laboulbeniomycetæ
Pyrenomycetæ p. p.

CURANTE

ALEX TROTTER

(Collab. P. A. et DOM. SACCARDO; G. B. TRAVESIO, A. TROTTER)

Fol. 44 — Pretium it. lib. aureis 60

ABELLINI

Die 15 Julii MCMXXVI

Sumptibus Coheredum SACCARDO

TYPIS PERGOLA

PHYCOMYCETÆ DE BARY

Syll. VII p. 181, IX p. 335, XI p. 239, XIV p. 432, XVI p. 383, XVII p. 494, XXI p. 815.

Fam. 1. Mucoraceæ NEES EM. DE BARY

MUCOR Mich. — Syll. VII p. 190, IX p. 335, XI p. 239, XIV p. 432, XVI p. 383, XVII p. 494, XXI p. 815.

1. **Mucor lusitanicus** Bruderlein, Bull. Soc. Bot. Genève, 1916, p. 273- 3315
276, f. 1-2. — Hyphis sporangiferis ramosis 2-30 mm. altis, 9-17 μ cr.; sporangiis globosis 45-70 μ diam.; tunica granulosa, in aqua in fragmenta se findente, basi columellae inserta; columella sphaerico-ovoidea, 45-56 μ longa 30-40 μ lata; sporis ellipsoideis, hyalinis, 6-8 μ diam.; zygosporis ignotis; chlamydosporis frequentissimis 10-30 \approx 11-20; oidiosporis raris 15 \approx 9.

Hab. in farina Maydis, in valle Douro, Lusitaniae. — Affinis *Muc. racemoso* et *M. christianiensis*.

2. **Mucor pallidus** Naoumoff in litt., *Mucor* sp. Scripta botanica, fasc. 3316
XXIX p. 72 t. IX fig. 9-15. — Mycelio albo-flavido; hyphis sporangiferis erectis demum decumbentibus, vix 1 cm. altis, parce ramosis, 8-10 μ cr.; sporangiis minutis levibus, sphaericis, 40-60 μ diam., membrana diu insolubili; columella sphaerica, 35-40 μ diam., levi, diaphana, collario basi praedita; sporis ex ellipsoideo cylindraceis, utrinque rutundatis 5-6 \approx 2,5-3,5; zygosporis brunneis, e sphaerico oblongis 35-45 μ longis, irregulariter tuberculosus.

Hab. cultus in laboratorio botanico, Petropoli, Rossiae.

3. **Mucor spinosus** Van Tiegh. — Sacc., Syll. VII P. I, p. 191. — var. 3317
recurvus Grove, Journ. of Biol. v. VI, 1911, p. 39, tab. III fig. 4. — A typo differt ramulis arcuato-recurvis et ramificatione plerumque sympodiali, nec ut in tipo plerumque monopodiali.

Hab. in culturis, Birmingham, Anglia.

4. **Mucor botryoides** Lendner (deest in Syll., sed ubi descriptum ?) — 3318
var. *minor* Jensen, Fung. Fl. of Soil, Cornell Univ., Coll. of Agric., Bull. 315 (1912) p. 457, c. ic. — A typo differt sporangiis brunneo-

atris, sporangiophoris crassioribus, ultra $30\ \mu$ latis, sporis minoribus omnino levibus, $4,5-8\ \mu$ diam. (typice $6\ \mu$); chlamydo-sporis limoniformibus, $16-22 \times 10-16$.

Hab. e solo cultus, Ithaca N. Y., Amer. bor.

5. *Mucor muriperda* Sacc. et Sinig., Ann. Mycol. XI, 1913, p. 321. — 3319

Late effusus, sordide albus, mox (in Agar cultus) luride griseo-olivascens, byssino-velutinus; hyphis mycelicis dendritice repetito ramosis repentibus rarius rhizinis praeditis, hyphis primariis concoloribus erectis filiformibus $14-18\ \mu$ cr. sursum vage ramosis, distincte et frequenter septatis; ramis sursum ternatis variae longitudinis, ascendentibus, apice sporangiophoris; sporangiis subglobosis, glabris, levibus, $30-40\ \mu$ diam., rarius usque ad 60 , initio pallidis demum saturate griseo-olivaceis; columella globosa, vel ellipsoideoglobosa, levi $28\ \mu$ diam. vel 28×25 , basi interdum fragmentis minimis tunicae sporangii cincta, olivacea; sporis exiguis, globosis v. globoso-ellipsoideis, $3,7-4,2\ \mu$ diam. v. $4,2 \times 3,5-4$, levibus, subhyalinis. Chlamydo-sporae intercalares et zygosporae rudimentales in mycelio occurrunt.

Hab. in Mure musculo var. albina, cui mortem attulit, in Laboratorio Pathologiae Chirurgicae Universitatis Mutinensis, hieme 1913. (Doct. GEORG. SINIGAGLIA).

Obs. Ad stirpem *Mucoris racemosi* videtur pertinere sed colore totius fungi mox saturate olivaceo, hyphis distincte septatis, sporis minoribus facile distinguitur. Praeterea dignoscitur quia hic valde pathogenus, dum *Mucor racemosus* innocuus experimentis nunc peractis demonstratur. Est affinis quoque *Mucori pusillo*, sed sporangia nunquam crystallis oxalati calcici conspersa. A *Mucore corymbifero* colore mox luride olivaceo, defectu apophysis sub sporangiis, sporis plerumque sphaericis etc. distinguitur.

6. *Mucor cornealis* V. Cavara et Sacc., Ann. Mycol. XI, 1913, p. 321; 3320

Cavara V., Una forma di cheratomicosi. Pavia 1913, in Annali Otalmol. XLII fasc. 9-10, con tav. — Mycelio laxo intertexto, candido, mox (in lacte, pane, tuberoque Solani exculito) cinereo-plumbeo, temperatura $+37\ C$ rapide et copiose se evolvente, aegre vero temp. $+15\ C$ vel supra $+51\ C$; hyphis sterilibus effusis, validis, dendritice ramosis, usque ad $14-15\ \mu$, continuis, hyalinis, apicem versus corymboso-v. racemoso-ramosis; ramulis sporangiophoris nunc alternis nunc oppositis, simplicibus v. dichotome par-titis, longitudine varia, $80-300 \times 7-8$, plerumque sub angulo $45-60^\circ$ patentibus, sursum sensim leviter incrassatis, sed sub sporangio

non coarctatis, achromis, apice fuscellis; sporangiis globosis v. subglobosis, tunica diaphana levi praeditis, 40-44 μ diam. (rarius usque ad 50-55 μ diam. et subinde tantum 15-22 μ); columella distincta, obovato-piriformi, plus minus dilute fusca, 22-24 μ lata; sporis tunica tenuissima hyalina, levigata praeditis, senio dilute flavicantibus, typice globosis, 4-4,5 μ diam., rarius globoso-ovoideis; zygo-sporis ignotis.

Hab. in *cornea oculari hominis*, cui pathogenus et ceratomyco-sis formam generans, Senis, Etruriae, Italia media, vere 1912. (Doct. VICTORIANUS CAVARA).

Obs. Sine dubio ob sporarum et sporangiorum parvitatem et ramorum dispositionem ad stirpem *Mucoris racemosi* pertinet. In primis est *Mucori Regnieri* Luc. et Cost. immo magis *M. corymbifero* affinis, sed notis allatis et praesertim vi pathogena peculiari distingui meretur.

7. **Mucor globosus** Fisch. — Sacc. Syll. XI p. 239. — Ann. Mycol. XI, 3321 1913, p. 567. — var. *intermedius* Sacc. — Caespitulis effusis, humilibus, griseo-olivascens; ramulis sporangiophoris saepius patentiar-
catis, copiose septatis 14-20 μ crassis; sporangiis globosis 90-100 μ diam., brunneis; sporangiis lateralibus paullo minoribus; columella globosa 40-45 μ diam., hyalina; collario tenui saepe remanente; sporis globosis 7-8 μ diam., levibus, olivaceo-fuscellis.

Hab. in contextu pathologico pedis humani, cultus in clinica chirurgica pisana Italiae (in tubere Solani et agar), (Doct. G. TERRA-ABRAMI). — Inter *Muc. globosum* et *M. lamprosporum* Lendn. videtur medius, a primo differt hyphis crassioribus, columella typica sphaerica, ramulis saepius curvis, sporangiis lateralibus paullo minoribus, ab altero sporarum colore, ramulis non semper recurvatis etc. A *M. sphaerosporo* dignoscitur colore numquam rubente etc.

8. **Mucor griseo-lilacinus** Povah, Bull. Torr. Bot. Club 44., p. 301, tab. 3322 18 fig. 5-10 (1917). — In pane floccum densum murino-griseum, aetate subavellaneo-tinctum, 1-1,5 cm. altum efformante; sporangiophoris 8-20 μ diam., initio simplicibus dein ramis lateralibus 1-2 iterum ramificatis praeditis, ramis semper in sporangium abeuntibus et ad basim septo transverso praeditis; sporangiis globosis vel subglobosis, 60-80 μ diam. (extremis 40-100 μ) primo luteolis dein griseo-virescentibus, membrana deliquescente limbum basalem relinquente, columella libera vel vix adnata; globosa vel subglobosa, 12-67 μ , saepius 27-43 μ diam., lilacino-griseo-tincta; sporis conformibus, ovoideis 4-6 \times 3-4, raro usque ad 8 \times 6 vel 10 \times 5 μ

coacervatis pallide griseis; chlamydosporis et oidiis praesentibus in hyphis, chlamydosporis e globoso doliiformibus, 10-30 μ diam., hyphis, praecipue substrato proximis membrana lilacino-tincta praeditis, contentu saepe aurantiaco-luteo; zygosporis non visis (species verisimiliter heterothallica).

Hab. in fimo, caulibus putrescentibus, foliis corruptis, in fungis etc., in Amer. bor.

9. **Mucor varians** Povah, Bull. Torr. Bot. Club 44. p. 298, tab. 20 3323 fig. 1-6 (1917). — In pane floccum densum ex eburneo-luteo subolivaceum v. alutaceum, 1-3,5 cm. altum efformante; sporangiorum 8-20 μ diam., parce vel copiose ramosis, intricatis, contortis vel convolutis, hyphis et columellis saepe proliferantibus; sporangiis globosis vel subglobosis, levibus, 43-116 μ diam. (plerumque 60-80 μ), initio luteolis vel pallide aurantiacis demum saturate griseis, viridi-tinctis, membrana deliquescente, limbum basalem relinquente, columella libera vel tenuiter adnata, forma maxime ludibunda: subglobosa, hemisphaerica, hemisphaerico-applanata, ovali, cylindrica, elliptica, piriformi, panduriformi, subconica, 18-70 \times 12-59 (med. 25-50 \times 20-45), protoplasmate aurantiaco farcta vel vacua, membrana griseola; sporis non uniformibus, ex ovoideo subellipsoideis, raro sphaericis, 4-6 \times 3-4 (extremis 4-14 \times 3-8) aliis irregularibus reniformibus vel cruciformibus haud raro intermixtis; zygosporis non visis (verisim. species hetherothallica).

Hab. in fimo, terra, lignis, fungis, in America bor.

10. **Mucor coprophilus** Povah, Bull. Torr. Bot. Club, 44., p. 297, tab. 19 3324 fig. 1-5 (1917). — In pane floccum laxum griseo-olivaceum 2-2,5 cm. alto efformante; sporangiorum brunneis 27-46 μ diam., ramulis elongatis vel brevibus, simplicibus vel ramosis, tenuibus praeditis, ramis in sporangia tenuia saepe decidua 20-60 μ diam. abeuntibus; sporangiis majoribus terminalibus globosis, incrustatis, 185-235 μ diam., initio albicantibus dein atris, membrana mox deliquescente (sporangis minoribus exceptis) et limbum basalem relinquente; columella libera, e cylindrico piriformi, 110-160 \times 70-113, brunneola, interdum contentu aurantiaco farcta; sporis in sporangiis majoribus striate ellipsoideis, 13-16 \times 5-6, in minoribus late ellipsoideis, 9-12 \times 7-8; chlamydosporis raris in sporangiorum; zygosporis non visis (verisimiliter species heterothallica).

Hab. in fimo cuniculino, in Amer. bor. — *M. griseosporo* affinis. Huc pertinere videntur specimina in Ellis et Everh., North Amer. Fungi 972, sub nom. *M. Mucedo* distributa.

11. **Mucor abundans** Povah, Bull. Torr. Bot. Club, 44., p. 292 tab. 17 3325
fig. 1-6 (1917). — In pane floccum densum, erectum, fumoso-griseum avellaneo-tinctum, 1,5-3,5 cm. altum efformante; sporangiophoris 8-23 μ diam., initio simplicibus dein ramulos 1-3 laterales gerentibus, ramulis ipsis iterum 1-2-vel pluries ramificatis et in sporangium abeuntibus, ramis ad basim septo praeditis; sporangiis globosis vel subglobosis, levibus vel tenuiter incrustatis, 39-98 μ diam. utplurimum 56-78 initio luteolis dein fusco-griseis, maturis viridulotinctis, membrana deliquescente limbum basilarem relinquente, columella e subgloboso piriformi libera v. tenuiter adnata, 21-66 \times 20-55, hyalina vel griseo-tincta; sporis variabilibus, e globoso late ellipsoideis, 3-5 μ diam. vel 4-5,5 \times 3-4,5 (paucis 8 \times 6); chlamydosporis et globulis luteolis in mycelio submerso; zygosporis non visis (verisimiliter mycelio heterothallico).

Hab. in fimo, ad terram, ad *Lycopersica* putres, in Amer. bor. — *M. griseo-lilacino* et *M. hiemali* affinis.

12. **Mucor griseosporus** Povah, Bull. Torr. Bot. Club, 44., p. 297 tab. 3326
18 fig. 1-5 (1917). — In pane floccum laxum, erectum, griseo-olivaceum, brunneo-tincto, 3-4 cm. alto efformante; sporangiophoris membrana brunneola praeditis, 20-70 μ diam., typice simplicibus vel ramulis brevibus 1-2 lateralibus in sporangia abeuntibus praeditis, in culturis vetustis septatis; sporangiis globosis, terminali 250-300 μ diam., crystallino-incrustato, lateralibus supra 100 μ diam., initio luteolis, maturis saturate griseis, membrana deliquescente (in sporangiis minoribus persistente) limbum basilarem relinquente; columella libera, piriformi, basi inflata vel panduriformi, 115-242 \times 88-165, contentu plerumque pallide aurantiaco; sporis uniformibus, ellipsoideis, 8-15 \times 5-8 griseis, coacervatis subatris, adglutinat; zygosporis non visis (mycelio verisimiliter heterothallico).

Hab. in fimo, in Amer. bor. — *M. piriformi* affinis.

13. **Mucor aromaticus** Povah, Bull. Torr. Bot. Club, 44., p. 296, tab. 3327
17 fig. 7-11 (1917). — In pane floccum laxum luteo-ochraceum vel ochraceo-aurantiacum 2-3 cm. altum efformante; sporangiophoris 20-50 μ diam., typice simplicibus vel ramulos 1-3 laterales sporangiferos gerentibus; sporangiis globosis, 100-160 μ diam., crystallis minutis incrustatis, plus minusve diaphanis, membrana deliquescente, limbum basalem relinquente vel non; columella libera, e subgloboso ovali, subpiriformi, 50-120 \times 43-105, contentu protoplasmatico praedita vel vacua; sporis uniformibus, ellipsoideis, 18-20 \times 10 (extremis 15-35 \times 7-14) raro ovatis vel subsphaericis; zygo-

sporis non visis (verisimiliter mycelio heterothallico).

Hab. in fimo, in Amer. bor. — Culturae odorem aromaticum camphoraceum effundunt.

14. *Mucor rhizophilus* Gorjeonne, Flora 1911, p. 147 (nomine nobis tantum nota). 3328

BLAKESLEA Thaxt., Bot. Gaz. LVIII (1914) p. 343 — (Etym. a cl. BLAKESLEE biologiae sexualis Phycomycetum scrutatore). — Mycelium gossypinum, copiose chlamydosporiferum. Sporangia biformia; majora solitaria Ochoanophorae similia, columellâ praeditâ et sporas atras, utrinque ciliatas appendiculatas generantia; minora (sporangiola) columellâ carentia sporas paucas atras utrinque ciliato-appendiculatas gignentia et coria vesiculam capitatum disposita.

1. *Blakeslea trispora* Thaxt., l. c. t. XXVI-XXVII. — Mycelio et hyalino aurantio; hyphis fertilibus erectis, subinde helicoideo-incurvis variis; sporangiis sphaericis circinatis, majoribus 40-50 μ d., pariete granuloso-aspera, columellâ ex hemisphaerico elongata; minoribus 14-16 μ d. distinctius grosseque rugosis, columella subnulla; capitulis sporangioliferis solitaris, sporangiola pauca ferentibus; sporangiolis plerum trisporis; sporis utriusque formae e purpureo rufo-brunneis, longitudinaliter striato-sulcatis, sporangiorum 8-10 \times 4, sporangiorum 12 \times 5. 3329

Hab. in larvis corruptis ad flores Vignae sinensis, Gainesville Florida, Amer. bor.

CIRCINELLA Van Tiegh. — Syll. VII p. 215, XVII p. 501, XXI p. 821.

1. *Circinella conica* Moreau, Bull. Soc. Mycol. Fr., 1913, p. 340, c. icon. — Hyphis fertilibus apice ramulis sporangiferis subcorymbosis circinantibus quandoque nonnullis sterilibus praeditis; pedicellis saepe septatis, sporangiis sphaeroideis, maturis 50-70 μ diam., flavidis, tunica oxalato calcico incrustata matura rimosa basi tantum persistente; columella parum subjacente, quandoque spinescente, saepe fragaeformi, subconica; sporis sphaeroideis, 6-10 μ diam., levibus, hyalinis, v. parum cyanescentibus; zygosporis non visis. 3330

Hab. in fimo Elephantis, in Museo Hist. Nat. Parisiis, Gallia. — *C. umbellatae*, minoris et praecipue *asperae* affinis.

2. *Circinella Sydowii* Lendner, Bull. Soc. bot. Genève, sér. 2, V (1913) p. 29, c. ic. — Hyphis primariis tenellis, sursum flexis, ad angulum ramum verticaliter crescentem quasi hyphae primariae continuatio-

nem emittentibus, ramis quoque apice flexis et ramulum apice flexum emittentibus, apicibus hypharum et ramorum acutis, saepe septatis, e latere pedunculum (raro duo) sporangiferum circinatum gerentibus, ramis extremis circinatis sporangiferis; sporangiis globosis, 100-100 μ diam., columella cylindrica aut cylindro-conica aut conica, quandoque medio parum constricta, panduriformis; sporis sphaeroideis, griseis, 6-7 μ diam.

Hab. in solutione sacchari in auri fodina, Johannesburg, Africa anstr.

RHIZOPUS Ehrenb. — Syll. VII p. 212, XI p. 240, XIV p. 435, XVI p. 385, XVII p. 502, XXI p. 822.

1. **Rhizopus alpinus** Peyronel, I Germi atmosfer. dei Funghi con mi- 3332
celio (1913) p. 17. — Hyphis repentibus, hyalinis vel dilute fuligin-
e, ludibundo diametro, hinc inde in articulos secedentibus, cae-
spitulos sordide albos, ob sporangia nigropunctatos efformantibus;
sporangiorum rectis vel curvulis, solitariis vel 2-5 fasciculatis,
rhizoidibus omnino destitutis, 12-16 μ diam., sursum paullo incre-
satis, ad basim saepe constrictis, pallide umbrinis, continuis vel
prope basim septatis, 100-250 \times 6 (prope pedem) — 16; sporangiis
nigris, globosis, 90-150 μ diam., impellucidis, tunica dilabenti prae-
ditis; columella globosa, 25-40 μ diam., vel piriformi, 40-50 \times 37-45;
sporis globosis vel plus minusve angulosis, singulis dilute fuscis,
coacervatis atris, levibus, 2-5 μ diam. Zygosporis ignotis.

Hab. e germinibus aëreis ex nemore Alni viridis, in liquido Bau-
lini agar consolidato cultis, Riclaretto (Pinerolo), Ital., bor.

2. **Rhizopus Delemar** (Boidin) Wehm. et Hanzawa, Mycol. Centrbl. I 3333
(1912) p. 86, c. ic., IV, 1914 p. 193 — *Mucor Delemar* Boidin, no-
men. — Caespitulis initio solutis, albis, dein densis, cinereis usque
ad nigros; rhizoidibus brunneis valde ramosis; sporangiorum
erectis vel curvis, nigro-fuscis, usque ad 1-2 mm. altis, 22-26 μ
crassis, more simplicibus, interdum autem valde ramosis, haud raro
hinc inde incrassatis ramosisque; sporangiis globosis, 90-270 μ diam.
(plerumque 140-180) initio albis dein nigris, saepe minute aculeo-
latis; columellis subglobosis, 60-100 \times 40-80, initio albis dein fuscis,
levibus; sporis globosis vel ellipsoideis, saepe obtuse angulatis, e
griseo brunneolis, 8-13 \times 6-9; chlamydosporis hyalinis vel subfuscis,
e cylindraceo globosis, 22-60 \times 17-30; zygosporis nondum visis. —
Optime vegetat in tuberibus Solani; magnopere saccharificat amy-
lum; fermentescit saccharosum, glucosum, fructosum, galactosum,

inulinam, raffinodium, maltosium; gelatinam tarde liquefacit; saccharum acidificat. — Opt. temp. 25-30°.

Hab. in amylo saccharificatione subjecto, in Japonia.

3. *Rhizopus kasanensis* Hanzawa, Mycol. Centrbl. I (1912) p. 408, tab. 3334 2 fig. 1 et V (1914) p. 235 fig. 4. — Primo albus dein e griseo nigricante; rhizoidibus valde ramosis e hyalino fuscis; sporangiophoris plerumque simplicibus, rectis vel parum curvatis, singulis vel 2-3 ad quoque nodum, initio hyalinis dein brunneis vel atris, 150-500 vel 1000-2000 μ altis, 6-25 μ crassis; sporangiis globosis, primo niveis demum atris, 60-180 μ diam., vel 37-195 \times 165; columella lata, subglobosa, fusca, 40-120 μ diam.; sporis irregulariter sphaericis, saepius obtuse angulatis, 4-7,2 μ diam. vel 3,6-7,8 \times 4,2-9,6, striatulis, fuscidulis; chlamydosporis evolutis, zygosporis non visis.

Hab. ex aere culto in Rossia; mycosim in oculis canis inducens.

4. *Rhizopus ramosus* Moreau, Bull. Soc. Bot. Fr. LX (1913) p. 220. — 3335 Mycelio hyalino repente, sporangiophoris erectis, raro simplicibus, plerumque furcatis vel umbellato-ramosis, ad basim ramorum inflatis (ramis ut videtur e sporangio rudimentali nascentibus); sporangiis sphaeroideis, 100 μ et ultra diam., membrana incrustata; sporis ovatis, striatulis, griseo-fuscidulis, 6 \times 3-4; columella hyalina, sphaerica, basi collariata.

Hab. in Gallia — Affinis *Rh. nigricanti* sed bene distinctus.

5. *Rhizopus Usamii* Hanzawa, Mycol. Centrbl. I (1912) p. 408, V (1914) 3336 p. 237, fig. 6. — Ex hyalino griseo-brunneus vel nigro-brunneus; rhizoidibus, interdum deficientibus, e nodulis 19-24 μ crassis orientibus, parce ramosis, primo hyalinis dein brunneis, sporangiophoris rectis vel curvatis, ramosis vel non, interdum hic inde vesiculoso-inflatis, 225-500 μ altis (interdum usque ad 2530), 12-24 μ latis, e hyalino brunneis; sporangiis globosis, erectis, 60-180 μ diam. vel 84-180 \times 72-150, initio hyalinis dein atro-brunneis; columella globosa 60-120 μ diam. vel ovoidea, 48-113 \times 40-120, e hyalino fuscidula levi; sporis pallide griseis vel brunneolis, proteiformibus: globosis, ovatis, cylindraceis vel obtuse angulosis, 3,6-7,2 μ diam. vel 3,6-7,8 \times 4,2-9,6; chlamydosporis praesentibus, zygosporis non visis.

Hab. in « Tanekoji », in Japonia (USAMI).

6. *Rhizopus nigricans* Ehrb. — Syll. VII p. 212 — var. *minor* Jensen, 3337 Fung. Fl. of Soil, Cornell Univ., Coll. of Agric., Bull. 315 (1912) p. 447, c. ic. — A typo differt sporangiophoris non ultra 2,5 mm. altis, nec ultra 28 μ crassis, sporis magis regularibus et angustioribus, 4,5-10 \times 4,2-6,6, obscure fuliginis.

Hab. e solo cultus, Ithaca N. Y., Amer. bor. — var. *verticillatum* Demelius, Verh. zool. bot. Ges. Wien, Bd. 66., 1916, p. 489, fig. 1. — A typo recedit, hyphis fertilibus ad apicem 4,6 subverticillato-umbellatis; hyphis rhizoideis parum evolutis, conidiophoris brunneis.

Hab. ad folia Cichorii, Vindobona, Austria.

7. *Rhizopus Trubini* Hanzawa, Mycol. Centrbl. I (1912) p. 408 tab. 3338 2 fig. 4 et V (1914) p. 236, fig. 5. — Initio albidus dein e griseo-albo brunneſcens; rhizoidibus, interdum deficientibus, parce ramosis, e hyalino fuscidulis; sporangiophoris plerumque 2-3 ad quoque nodum, rectis vel curvatis, simplicibus vel ramosis, interdum hinc inde vesiculoso-inflatis, 180-2000 μ altis, 4,8-26,4 μ latis; sporangiis globosis, maturis atris, 60-200 μ diam.; columella globulosa, ovoidea, subcylindracea vel piriformi, initio hyalina dein pallide brunnea, levi, 40-120 μ diam. vel 60-120 μ 50-143; sporis irregulariter globosis, ovatis, subangulosis, magnitudine ludibundis, 3,6-7,2 μ diam. vel 3,6-7,2 μ 4,8-8,4, griseis vel brunneolis, striatulis; chlamydosporis 16,8-28,8 μ 9,6-21,6; zygesporis non visis.

Hab. ex aere culto, in Rossia. — In canibus inoculatus, mycosim laetalem inducit.

8. *Rhizopus equinus* Luc. et Cost. — Syll. XVII p. 502 — var. *annamensis* P. N. Bernard, Bull. Soc. Mycol. 1914, p. 232, t. XIV. — Pedunculis sporangiferis binis aggregatis in hypha recta v. curva rhizoidifera, mucor ex pedunculis singulis arhizoideis; sporangiis sphaeroideis supra et infra parum depressis, 48-84 μ diam.; columellis 48-52 μ 18-24; sporis levibus rotundatis 4 μ diam.; chlamydosporis numerosis.

Hab. in expectoratione hominis bronchytis aegroti, Hué Annam, Asia. — *Rh. equini* Luc. et Cost. 1903 affinis.

ABSIDIA Van Tiegh. — Syll. VII p. 214, IX p. 337, XI p. 240, XIV p. 435, XVI p. 386, XVII p. 504.

1. *Absidia cylindrospora* Hagem, Videnskabselsk. i Kristiania, 7 febr. 1907, et Unters. Norw. Mucor. in Videnskabs-Selskabets Skrift. 1. Math. Nat. urw. Kl. 1907, n. 7, p. 45 fig. 21. — Syn. *Abs. spinosa* Lendner, C. R. Seanc. Soc. bot. Genève, 18 febr. 1907, et Bull. Herbar. Boissier 2.^e ser. v. VII n. 3, 1907; Syll. XXI p. 824.
Nomen Hagemi anterior et tunc servandum.

PHYCOMYCES Kunze — Syll. VII p. 204, XIV p. 434.

1. *Phycomyces spinulosus* Morini, Mem. Accad. Bol., Sez. Sc. Nat. X 3341

1914 p. 97 tab. fig. 5-10. — A *Phyc. nitenti*, cui valde affinis, sporangiis, sporis et columellis mox distinguitur, zygosporis superficie processibus bifidis acutisque cum episporio nigricantibus exasperatis.

Hab. in fimo vaccino, sociis Pilobolis, in agro Bononiensi Ital. bor., parce.

PERICYSTIS A. D. Betts, Ann. of Bot. XXVI, 1914, p. 795. -- Hyphae repentes vel suberectae, contextae, ramosae, septatae, cellulis multis in chlamydosporas se mutantibus, tandem saepe se dissolventes. Chlamydosporae terminales, laterales et intercalares, subglobosae vel irregulariter ovoideae, membrana crassa levi. Sporangia subglobosa vel ovoidea, ramis hypharum 3-5 fulta, sporis numerosis repletae; tunica sporangiorum membranacea, simplex, levis, tandem fusca. Sporae hyalinae, sphaericae, membrana crassa levi.

1. *Pericystis alvei* Betts, loc. cit. p. 795, tab. 75-76; Journ. of Eco- 3342
nom. Biol., VII, 1912, p. 155 fig. 23-25. — Characteres ut supra. Mycelio albo, hyphis 2-6 (saepissime 5) μ diam.; chlamydosporis 4,5-9,5 \times 4,5-7; sporangiis 20-40 \times 20-30; membrana tandem atro-viridi; sporis 3,7-4,7 μ (saepissime 4,3 μ) diam.

Hab. ad pollinem, in favis Apis mellificae, in Britannia.

ZYGORRHYNCHUS Vuill. — Syll. XVII p. 500, XXI p. 825.

1. *Zygorrhynchus Dangeardi* Moreau, Bull. Soc. Bot. Fr. 59 (1912) p. 3343
LXVII (1913). — Mycelio albido plerumque vix $\frac{1}{2}$ cm. alto, in culturis senescendo griseo dein atro; sporangiis haud copiosis sporangiophoris ramosis suffultis, globulosis, luteolis, 25-65 μ diam. membrana in aqua disrumpente et collare basilare relinquente; columella levi, 12-32 μ alta, 12-36 μ lata; sporis ovoideis, 2-5 \times 2-4,5, hyalinis, 1-2 guttatis; chlamydosporis raribus, ovatis, levibus, 30 \times 15; zygosporis aëreis, ad superficiem substrati praecipue sese efformantibus, e fusione zygorrhororum initio similibus dein heteromorphis productis, ut plurimum globosis, 18-48 μ diam, interdum vero retortaeformibus vel etiam cucurbitaeformibus, initio tuberculis minutis luteolis demum spiculis atris 3-5 μ longis saepe recurvis, regulariter sparsis exornatis. — A caeteris speciebus differt praecipue quia e zygosporarum nucleis quatuor tantum bini inter se conjugantur.

Hab. in Gallia.

2. *Zygorrhynchus Bernardi* Moreau, Bull. Soc. Bot. Fr. LX (1913) p. 3344

256. — *Mycelio albo, elevato*; sporangiophoris botryose ramificatis; sporangiis sphaericis, 18-53 μ diam., paucis, columella subsphaerica, parum latiore quam alta, 11-23 \times 10-20; sporis ovoideis, 3 \times 2, levibus; zygosporis aereis, sphaeroideis, initio lutescentibus dein nigris, 32-50 μ diam., spinulis sparsis vel hinc inde caespitosis, 3-5 μ altis ornatis; chlamydosporis doliiformibus, 30 \times 20.

Hab. in Gallia.

3. *Zygorrhynchus japonicus* Kominami, Mycol. Centrbl., V p. 3 (1914) 3345 cum tab. — Hyphis sporangiferis 9-15 μ latis; sporangiis globosis, 56 μ diam., membrana in aqua diffuente, columella subglobosa vel obovata, 30-45 μ alta, 20-30 μ lata; sporis ellipsoideis, hyalinis, variae magnitudinis, 3-10 \times 1,5-6; chlamydosporis levibus, ovoideo-elongatis 40 \times 25; zygosporis globosis, episporio verrucoso brunneo; 68-80 μ diam.

Hab. in terra, ex culturis, Kamakoura, Japonia.

PILOBOLUS Tode — Syll. VII p. 184, XVII p. 505, XXI p. 827.

1. *Pilobolus Schmidtii* Saccardo n., *Pilobolus* sp. Alfr. Schmidt, Jahresb. Schles. Gesellsch., 1912 p. 19. — Conidiophoris solitariis e basi ovoidea, 560-720 \times 340-400, dilute flavida, rhizoidibus praedita oriundis, cylindraceis 1,8 mm. altis, 120 μ cr., infra usque 140-160; vesicula subsporangiali ovoidea subhyalina, 800-1000 \times 640-800, infra anulata, contentu granuloso aurantio; columella hyalina, apice rotundata, fortiter contracta, 250-370 \times 180-270; sporangis hemisphaericis, nigris, 430-510 μ cr., 240-400 μ altis; membrana nigro-cyanea, verrucosa; sporis flavis, in aqua non secedentibus, ellipsoideis, tenuiter tunicatis, 6,5-8,5 \times 5-6.

Hab. cum fimo Muli, ex Amani, Africae orient., in laboratorio bot. Breslaviae cultus. — Affinis *P. Kleinii* sed mensura partium diversa.

HAPLOSPORANGIUM Thaxt., Bot. Gaz. LVIII (1914) p. 362 — (Etym. *haplos* simplex et sporangium). — Mycelium filamentosum, contracto-septatum, ramosum, tomentosum. Sporangiphora radiatim evoluta, subcuspidata, sporangia singula v. bina 1-2-spores apicibus ferentia. Affine *Mortierellae*, a qua imprimis differt fabrica mycelii.

1. *Haplosporangium bisporale* Thaxt., l. c. p. 363 t. XXIX. — Ex albo 3347 flavidum; sporangiophoris cuspidatis, brevibus, indivisis v. furcatis, continuis 48-55 \times 5; sporangiis globosis, levibus, monosporis 8 μ diam., bisporis 11-12; sporis singulis sphaericis, binis hemi-

sphaericis, hyalinis, subinde minutissime rugulosis

Hab. in stercore suino, murino etc., E. Tennessee, Maine, New Hampshire, Amer. bor.

2. **Haplosporangium decipiens** Thaxt., l. c. p. 364 t. XXIX. -- Affine 3348
praecedenti, sed sporangiophoris jugiter majoribus, 60-65 μ longis; sporangiis semper monosporis et nutantibus 8-10 μ diam.; tunica rugoso-aspera; sporis sphaericis et levibus.

Hab. in stercore *Selenodontis*, ex ins. Hayti seu S. Domingo, Ind. occid., inde cultum.

DISSOPHORA Thaxt., Bot. Gaz. LVIII (1914) p. 361 — (Etym. *dissos* duplex, geminus, et *phoreo* fero). — Hyphae fertiles ex mycelio tenui repente abrupte mutatae, indefinite crescentes ubique sporangiophora brevia simplicia edentes. Sporangia solitarie acrogena globosa. Sporangia et sporae ut in *Mortierella*.

1. **Dissophora decumbens** Thaxt., l. c. p. 361, t. XXVIII. — Hyphis 3349
fertilibus primariis erectis, dein decumbentibus, firmis, apice indefinite crescentibus, raro septatis; sporangiis sphaericis, columella carentibus, 17-23 μ diam. in sporangiophoris sursum tenuatis, 100-150 \approx 8 acrogenis; sporis globoso-angulosis, 4 μ diam.

Hab. in stercore murino, pr. Cambridge Mass., Amer. bor.

MORTIERELLA Coëm. — Syll. VII p. 221, IX p. 337, XI p. 240, XVI p. 387, XVII p. 506, XXI p. 828.

1. **Mortierella alpina** Peyronel, I Germi atmosfer. dei Funghi con mi- 3350
celio (1913), p. 17. — Effusa, tenuis, alba; hyphis sterilibus repentibus, ramosis, hyalinis, continuis, 0,5-4 μ diam., sporangiophoris erectis, simplicibus deorsum crassioribus, sursum leniter attenuatis, protoplasmae aequali faretis, 70-100 \approx 5-7, in sporangium unicum abeuntibus; sporangiis sphaericis, 8-16 μ diam., levissimis, membrana hyalina; sporis ovalibus vel ellipsoideis, levibus, hyalinis, 3-4 \approx 1,5-2, absque nuclei vel guttulae vestigio.

Hab. e germinibus aëreis in agaro cultis, M. Cournour (Alpi Cozie), Ital. bor., alt. 2868 m.

2. **Mortierella Traversiana** Peyronel, I Germi atmosfer. dei Funghi 3351
con micelio (1913) p. 17. — Effusa, tenuis, sordide alba; hyphis sterilibus repentibus, ramosis, continuis, protoplasmae hinc inde granuloso faretis; sporangiophoris erectis, deorsum incrassatis, sursum attenuatis, 100-700 \approx 6-8, simplicibus vel ramosis, et tunc ramis in racemum dispositis, sursum attenuatis, in sporangium abe-

untibus; sporangiis sphaericis, 15-40 μ diam., levibus, membrana hyalina praeditis; sporis globosis vel mutua compressione polygonis, 4-7 μ diam., raro ellipsoideis, usque ad 12 \times 7, hyalinis, epi-sporio echinulato praeditis. Chlamydosporis rhombicis vel ellipsoideis, protoplasmate minute granuloso faretis, hyalinis, levibus, membrana crassiuscula instructis, 14-15 \times 9-12.

Hab. e germinibus aëreis in agaro cultis, M. Cournour (Alpi Cozie) Ital. bor., 2868 m. alt.

3. *Mortierella globulifera* O. Rostrup, Dansk. Botan. Arkiv. 2., 1916, 3352 n. 5, p. 2, fig. 1. — Hyphis sporangiferis caespitosis, continuis, simplicibus, basi incrassatis $\frac{1}{2}$ mm. altis, infra 24-28 μ , supra 4,5-5,5 μ crassis, basi vesiculis subglobosis, hyalinis instructis; sporangiis globosis, albis, glabris, 40-48 μ diam.; sporis globosis, epi-sporio tenuiter echinulato, 6-7 μ diam.

Hab. in fimo equino, S. Jaegersborg Dyrehave, Dania.

CUNNINGHAMELLA Matr. — Syll. XVII, p. 508, XXI p. 828.

1. *Cunninghamella Bertholletiae* Stadel, Dissert. Kiel (Lüdtke et Mar. 3353 tens ed.) 1911. — Nomine nobis tantum nota.

Hab. in *Bertholletia putrescenti*, ex Brasilia.

Fam. 2. Entomophthoraceæ SCHR.

EMPUSA Cohn. — Syll. VII p. 281, IX p. 349, XXI p. 831.

1. *Empusa elegans* Maimone, Centralbl. Bakt. II Abt., 40. (1914) p. 107, 3354 5 tab. — Conidiophoris simplicibus, clavatis, cytoplasmate vacuoloso plurinucleato praeditis; conidiis typice piriformibus, apice truncatis, plurinucleatis, vacuolum centrale amplum praebentibus, 24-36 \times 15-24; chlamydosporis globosis, membrana incrassata glabra praeditis, plurinucleatis, 36-63 μ diam.; gemmis (mycelio) multiformibus, in hospite intus crescentibus; conidiophoris et conidiis extus non efflorescentibus.

Hab. in larvis *Porthesia chrysorrhoeae*, quas necat, Campobasso, Ital. austr.

ENTOMOPHTHORA Fres. — Syll. VII p. 282, IX p. 351, XIV p. 437, XVI p. 388, XVII p. 510, XXI p. 831.

1. *Entomophthora Pseudococci* A. T. Speare, Fungi Parasitic up. In- 3355 sects Injurious to Sugar Cane, Rep. Exp. Stat. Hawaii. Sug. Plant.

Ass., Bull. n. 12, 1912, p. 14, 26, tab. I-II. — Conidiis sphaeroideis subconicoideo-papillatis, 20-25 μ cr.; conidiophoris plerumque simplicibus e mycelio emergentibus; conidiis secundariis presentibus, conformibus, e mycelio conidii primarii varie productis; sporis perdurantibus, zygosporis, sphaeroideis hyalinis, levibus, 20-27 μ cr.; hyphis rhizoideis presentibus, ex 2-3 hyphis simplicibus, apice ramosis, tortuose contextis. efformatis.

Hab. in *Pseudococco calceolariae* parasiticum, Honolulu, Ins. Hawaj.

2. *Entomophthora Henrici* Molliard, O. R. Acad. Sc. Paris t. 167, 1918, 3356 p. 958. — Hyphis conidiophoris ramosissimis; conidiis ovoideis, hyalinis, pluriguttulatis, apice non apiculatis, 20-24 \times 13-18; conidiis secundariis conformibus; azygosporis sphaeroideis hyalinis, 32-36 μ diam.; cystidiis et chlamidosporis in cultura praesentibus.

Hab. in *Culice pipienti* emortuo, Gallia.

3. *Entomophthora Nebriae* Raunkiaer, Botanisk Tidsskrift, XVIII, 3357 1892-93. — Hyphis conidiophoris ramosis, septulatis, hyalinis, sursum claviformi-incrassatis, 11-15 μ latis; conidiis ellipsoideis vel fusiformibus, saepe subcurvatis, 28-37 μ longis, 10-13 μ latis, hyalinis, levibus; sporis perdurantibus latere hypharum mycelii hyalino-brunneoli extra corpore insecti evolutis, globosis, 35-50 μ diam., hyalino-brunneolis, episporio subcrasso levi tectis.

Hab. in *Nebria brevicolli* emortuo, in Dyrehaven prope Hauniam (Saellandia), (1888 legit Auct.).

4. *Entomophthora Jaapiana* Bubák, Ann. Mycol. 1916, p. 341. — Sporis 3358 perdurantibus corpore pulvere laete flavo omnino implentibus et mumificantibus, inter articulos omnes linealiter exsurgentibus, globosis, 35-45 μ diam., hyalinis v. dilutissime flavidis, episporio 2-2,5 μ cr. glaberrimo; hyphis saepe ramosis, 10-14 μ cr. parte inferiore fortiter flexuosis, supra in parte sporigera clavatis, hyalinis, continuis.

Hab. in cadaveribus *Euacanthi interrupti*, Oberkopt, ad 750 m. alt., in silva Thuringiaca, Germania (O. JAAP).

Fam. 3. Chytridiaceæ DE BARY ET WOR.

PLEOTRACHELUS Zopf. — Syll. VII p. 315, XIV p. 440, XVI p. 389, XXI p. 835.

1. *Pleotrachelus Ectocarpii* Milla Jokl, Oesterr. Bot. Ztschr. LXVI, 3359

p. 267, tab. 4-5 (1916). — Mycelio nullo; sporangiis globosis, solitariis vel plurimis in quaque cellula, magnitudine maxime ludibundis, minimis $3,2\ \mu$, maximis $40\ \mu$ diam., interdum irregularibus, e zoosporis amoeboides directe orientibus, collum plerumque unicum, raro $3-4$, $6,60\ \mu$ longum $2,5-10\ \mu$ crassum praebeantibus, contentu granuloso faretis; zoosporis haud bene visis.

Hab. in cellulis *Ectocarpus granulosis*, prope *Ergestem* lecti.

2. *Plectrachelus Zopfianus* Morini, Mem. Accad. Bologna, Sez. S. Nat. 3360 X, 1914, p. 77, tab. fig. 1-4. — Zoosporangiis globosis, pallide flavo-aurantiis, $41-47\ \mu$ diam.; zoosporas ovoideo-piriformes, uniciliatas, $3-4\ \mu$ longas includentibus, maturitate singulam v. binas appendices filiformes proferentibus; appendicibus membranam trophocystarum matricis perforantibus et zoosporis disseminantibus.

Hab. in trophocystis bicellularibus *Piloboli Piroltani*, in agro Bononiensi, Ital. bor.

WOLKIA (Wolk) J. Ramsbottom, Trans. Brit. Myc. Soc. V, pt. 1., 1914, p. 143 (1914). — Ita vocandum *Protascus* V. d. Wolk, Myc. Centr. III (1913) p. 153, cum extet antierius *Protascus* Dang., Syll. XVII p. 516.

1. *Wolkia decolorans* (Wolk) J. Ramsb., l. cit. — *Protascus decolorans* 3361 V. d. Wolk, loc. cit. cum tab. col. — Mycelio tenui, varie ramoso, copiose septato luteo-roseolo; ascis in ramis mycelii acrogenis, globosis, in juventute roseis, granuloso-faretis et grosse guttulatis; sporis in quoqueasco numero variabilibus, $2-15$, plerumque vero 15 , ellipsoideis vel subglobosis, levibus, rufo-brunneis.

Hab. in caryopsidibus *Oryzae sativae*, quas colore luteo tingit, « yellow grains », Buitenzorg, Java. — Mensurae desiderantur.

PROTASCUS Dang. — Syll. XVII p. 516.

1. *Protascus subuliformis* Dang. — Syll. XVII p. 516 — var. *Maupasii* 3362 Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1915, p. 50. — A typo differt thallo longiore pluri-(usque ad 8-) septato, articulis totidem sporocysta gignentibus; nec non oosporis heterogamicis globosis, levibus, $15-30\ \mu$ diam.

Hab. parasitice in corpore *Rhabditis*, Algeria, Africa bor.

OLPIDIUM A. Braun — Syll. VII p. 310, IX p. 362, XI p. 246, XIV p. 438, XVI p. 389, XVII p. 511, XXI p. 833.

1. *Olpidium Viciae* S. Kusano, Journ. Coll. of Agric. Tokyo, IV, 3 3363 (1912) p. 188, c. tab. — Zoosporangiis in cellulis epidermicis solitariis vel gregariis (saepe usque ad 20) ita ut sporangia quiescentia, forma et magnitudine variabilibus, cellulæ hospiti conformibus quando solitariis, quando gregariis mutua pressione polygonalibus, 20-120 μ diam.; collo brevissimo, in sporangiis minoribus unico, in majoribus copiosis (4-7) e quibus vero uno tantum fungente; zoosporis hyalinis, ellipsoideis, vel ovatis, 6-7 \times 5, cilio posteriore unico praeditis; sporangiis quiescentibus solitariis vel aggregatis (saepe ultra 10) in cellulis epidermicis, 17-47 μ diam., exosporio lutescente tenui, endosporio hyalino crassiusculo, e copulatione zoosporarum ortis.

Hab. in caulibus et foliis *Viciae unijugae*, Tokyo, Japonia.

OLPIDIOPSIS Cornu. — Syll. VII p. 299, IX p. 362, XI p. 247, XIV p. 439, XXI p. 834.

1. *Olpidiopsis luxurians* J. T. Barrett, Annals of Bot. XXVI (1912) 3364 p. 231, tab. 23-26. — Zoosporangiis solitariis vel numerosis, in cellula matricis plerumque intercalaribus viventibus, e ovalibus sphaeroideis, magnitudine variis, collis 1-3 extra cellulam matricis valde prominentibus ornatis; zoosporis minutioribus, elongatis, ciliis duobus apicalibus vel subapicalibus praeditis; oosporis sphaericis 25-50 μ diam., endosporio crasso, episporio tenui, spinis numerosis, conicis, basi dilatatis, apice acutissimis; antheridiis globosis, vel saepe ovoideo-ellipsoideis, 10-25 μ diam., membrana levi hyalina.

Hab. in *Aphanomyces laevi*, Ithaca, N. Y., Amer. bor.

2. *Olpidiopsis vexans* J. T. Barrett, Annal. of Bot. XXVI (1912) p. 231, tab. 23-26. — *O. Saprolegniae* A. Fisch. in Rabh. Krypt. Fr. Deutschl. I, IV, p. 38, non Cornu. — Zoosporangiis solitariis vel numerosis, in cellula matricis terminalibus vel intercalaribus viventibus, ellipsoideis, ovalibus vel sphaericis, magnitudine variis, 50-176 μ diam., hyalinis, membrana tenui, levi; zoosporis numerosis, elongatis, ciliis duobus apicalibus vel subapicalibus praeditis; oosporis griseis, sphaericis vel ovatis, interdum ellipsoideis, circ. 116 \times 84 (saepissime 50 μ diam.), endosporio crasso, levi, episporio tenui verrucoso; antheridiis hyalinis, sphaericis vel ovoideis, membrana tenui levi cinctis, 20 μ diam.

Hab. in *Saprolegnia feraci*, Ithaca, N. Y., Amer. bor.

SOROLPIDIUM Nêmec, Bull. int. Acad. Sc. Bohem., 1911; Ber. deutsch. bot. Ges., Bd. XXIX, 1911, p. 48.

1. **Sorolpidium Betæe** Nêmec, l. c. p. 48.

3366

Hab. in radicibus emortuis *Betæe vulgaris*, Europa med.

WORONINELLA Rac. — Syll. XVI p. 392.

1. **Woroninella acidoides** (Peck.) H. Sydow, Ann. Mycol. XII, 1914, 3367 p. 485. — Ita vocandae sunt *Uredo acidoides* Peck, *Uredo Pecki* Thümen, *Synchytrium decipiens* Farl., *Synchytrium acidoides* Farl.
2. **Woroninella Dolichi** (Cke) H. Sydow, Ann. Mycol. XII, 1914, p. 485. — 3368 Ita vocandum est *Aecidium Dolichi* Cke., *Uromyces vignicola* P. Henn.
3. **Woroninella Puerariae** (P. Henn.) H. Sydow, Ann. Mycol. XII, 1914, 3369 p. 486. — Ita vocandum est *Uromyces Psophocarpi* Raciborski.
4. **Woroninella citrina** (Lagh.) H. Sydow, Ann. Mycol. XII, 1914, 3370 p. 486. — Ita vocandum est *Synchytrium acidoides* var. *citrinum* Lagh.
5. **Woroninella aequatoriensis** H. Sydow, Ann. Mycol. XII, 1914, 3371 p. 486. — Sporae 20-28 μ diam.

Hab. in foliis *Psoraleae Mutisii*, Quito, Aequatoria, Amer. austr. (G. v. LAGERHEIM).

SYNCHYTRIUM De Bary. — Syll. VII p. 288, IX p. 357, XI p. 247, XIV p. 441, XVI p. 390, XVII p. 512, XXI p. 838.

1. **Synchytrium trichophilum** Correns et Tobler, ap. G. Tobler, Synchytrien, in Arch. Protistenk. XXVIII (1913) p. 174, tab. 12 fig. 35-37. — Syn.? *S. Jaapianum* P. Magn. 1914. — Cellulis perdurantibus singulis vel pluribus (2-8), 45-60 μ diam., membrana externa nigrescenti-flava, levi, 4 μ circ. crassa, protoplasmate granulato, brunneo, protoplasmatis cellulae hospitalis massa tectis; sporangiis 30-40, rotundatis, 12 μ circ. diam.; zoosporis incognitis.

Hab. in pilis foliorum et caulium *Symphyti officinalis* [Borraginaceae] quos saepe deformat, prope Lipsias Saxoniae in Germania (CORRENS). — Verisimiliter eodem est ac *Synch. Jaapianum* P. Magn. in Jaap, Ann. Mycol., XII, 1914, p. 2, quoque in *Symph. off.*, ex Rödgen Germania.

2. **Synchytrium incrassans** Maire, Bull. Soc. H. N. Afrique du Nord, 3373 1917, p. 1917, p. 135. — Cellulis saepe in basi pilorum evolutis, compositis, e luteolo atro-brunneis, punctiformibus, frequenter ag-

gregatis, 1-3 cellulas matricis continentibus; cellulae matricis cystis fere repletas, contentu e hyalino rufo-brunneo, granuloso, demum saepe subnullo, membrana valde incrassata, e hyalino dilutissime brunneola; cellula matrice stratu unico cellularum valde incrassatarum hyalinarum obvoluta; cystis in cellulis matricibus singulis, episporio levi, crassiusculo, 7 μ cr., e hyalino fulvo guttulis numerosissimis farcto praeditis.

Hab. in foliis vivis *Thriniciae tuberosae* [Compositae], in Mauretania, Afr. sept.

3. *Synchytrium globosum* Schröt. — Syll. VII p. 288 — v. *alpestre* Maire, 3374 Bull. Soc. Bot. Fr. LVII (1910) p. CLXVI. — Gallis plerumque compositis e pallido brunneolis, cellula matrice unica semper hyalina v. subhyalina praeditis; chronizoocysta (cysta) in cellulis matricibus singula rarius bina, episporio levi, 1-2 μ cr. e hyalino dilute brunneolo, tenui induta, globosa v. subglobosa, 30-60 μ diam. contentu griseo-hyalino farcta.

Hab. in caulibus foliisque *Phyteumatis*, prob. pauciflori [Campanulaceae], in pascuis alpinis Passo del Ladro, Alpi marittime. — A typo differt gallis dilutius coloratis et cystae tunica tenuiore nempe 1-2 μ cr. nec 3-4 μ .

4. *Synchytrium Bromi* Maire, Bull. Soc. H. N. Afr. du Nord, 1917, 3375 p. 134. — Cystis in maculis foliorum atro-purpureis gregatim evolutis, subglobosis, ellipsoideis v. e mutua pressione plus minusve compressis, levibus, brunneis, pellucidis, 75-260 \times 60-250, 1-nucleatis, membrana usque ad 12-15 μ cr. praeditis.

Hab. in foliis vivis *Bromi madritensis juvenilis* [Graminaceae], in Mauretania, Afr. sept.

5. *Synchytrium Marrubii* G. Tobler, Synchytrien, in Arch. Protistenk. XXVIII (1913) p. 221. — *Synchytrium*? — Farlow in Bot. Gazette X (1885) p. 240. — Gallis? minutis, 60-75 μ diam., noni prominentibus; soris perdurantibus? in cellulis matricibus hypertrophicis.

Hab. in foliis *Marrubii vulgaris* [Labiatae], in America bor. — Species omnino dubia.

6. *Synchytrium Ulmariae* K. Falek et Lagerh., Ark. f. Bot. XII (1912) 3377 n. 5 p. 4 (comm. 24 apr. 1912, edita 3 dec. 1912); *S. Ulmariae* Tobler, Archiv. Protistenk., XXVIII, 1913, p. 191, tab. 13 fig. 50. — Verrucis minutissimis amphigenis sed plerumque hypophyllis nerviculis, 60-100 μ diam.; sporangiis solitariis, raro 2-3 in quoque

cellula, globosis v. globoso-ellipsoideis, 40-60 μ diam.; exosporio levi, flavo contentu hyalino.

Hab. in foliis *Spiraeae Ulmariae* [Rosaceae], Fjällnäs, Älfkarleö, Runmarö, Stora Rör, in Suecia.

7. *Synchytrium aurantiacum* G. Tobler, *Synchytrien*, in Arch. Protistenk., XXVIII (1913) p. 186, tab. 12 fig. 44. — Tuberculis compositis, aggregatis, pomiformibus, aurantiacis, vertice depresso, 300 μ circ. diam.; soris perdurantibus, globosis, 150 μ circ. diam., contentu oleoso flavo; sporangiis et zoosporis non visis.

Hab. in foliis caulibusque, praecipue in nervis foliorum *Salicis repentis* [Salicaceae], prope Münster Westf. in Germania (G. TOBLER).

8. *Synchytrium cellulare* Davis, *Parasit. Fungi Wisconsin IV*, Trans. Wisc. Ac. of Sc. etc. XIX, 1919, P. II, p. 681, cum icon. — Gallis foliicolis amphigenis, quandoque petiolicolis, 130-240 \times 110-150, e cellula magna centrali et minoribus periphaericis (30-40 μ cr.) circumdata; cellula centrali quandoque horizontaliter divisa, infra sporangifera; sporangiis 30 v. ultra, flavis, e sphaeroideis ellipsoideis, 18-26 \times 15-22; sporis persistentibus e globosis ellipsoideis, brunneis, 50-90 \times 40-80.

Hab. in foliis petiolisque *Boehmeriae niveae* [Urticaceae], prope Devils Lake, Wisconsin, Amer. bor.

RHIZOPHIDIUM Schenk — Syll. VII p. 298, IX p. 362, XI p. 248, XIV p. 443, XVI p. 390, XVII p. 512, XXI p. 842.

1. *Rhizophidium Eudorinae* Hood, Proc. Birm. N. H. Soc. XII (1910) p. 45 et Trans. Br. Mycol. Soc., V (1916) p. 236. — Mycelio filamentoso, tenui protoplasmatico, simplici, zoosporangiis supra cellulam hospitem evolutis, phialiformibus, longe rostratis, hyalinis, 20-35 μ longis, 10-17 μ latis; zoosporis copiosis, ovoideis, 2 μ circ. diam., 1-ciliatis, guttula oleosa minuta refringente praeditis; sporis duraturis sphaeroideis, asexualiter orientibus, externis, membrana crassa, hyalina, sparse minuteque granulosa, guttula oleosa ampla intus repletis, 10-16 μ diam.

Hab. parasitice in coloniis semoventibus *Eudorinae elegantis*, Lutton Park, Warwickshire, Britannia.

2. *Rhizophidium monosporum* Maire, Bull. Soc. Linn. Normandie, ser. 6., II, p. LXVIII (1910). — Nomen nudum.

Hab. in granulis polliniceis *Pini*, in horto botan. Caen, Gallia.

MITOCHYTRIDIUM Dang., Bull. Soc. Mycol. de Fr., 1911, p. 200. — Sporangia singula in cellulis matricis nidulantia, finiculoso-ramosa, non septata, hinc inde ostiolo cylindraceo praedita. Zoosporae rotundatae, uni-guttulatae uni-flagellatae. Hyphae rhizoideae hinc inde a superficie sporangiorum orientes. Sporae perdurantes (? oosporae) sphaeroideae, crasse tunicatae.

1. *Mitochytridium ramosum* Dang., l. c. p. 202 fig. 1. — Sporangiiis 60 μ 3382 cr., sabdichotomice divisus et 100 μ et ultra longis; zoosporis 4-5 μ diam. longe flagellatis; ? oosporis sphaeroideis crasse tunicatis, granuloso-faretis, 25-30 μ diam., solitariis vel 2-3 congregatis et filo rhizoideo conjunctis.

Hab. parasitice in Desmidiaceae, *Docidium Ehrenbergii*, in paludosis prope Ségrie Sarthe, Gallia.

CHYTRIDIUM A. Br. — Syll. VII p. 304, IX p. 358, XI p. 250, XIV p. 446, XVII p. 513, XXI p. 844.

1. *Chytridium alarium* Al. L. Kibbe, Puget Sound Mar. Sta. Pub. 1., 3383 1916, pp. 221-226, tab. 39-40. — Nomine nobis tantum nota.

PHYSODERMA Walhr. — Syll. VII p. 317, IX p. 363, XI p. 250, XIV p. 447, XVII p. 513, XXI p. 846.

1. *Physoderma Narcissi* (Poir.) Sacc. et Trott., *Cladochytrium* (Physo- 3384 derma) *Narcissi* Poirault, Bull. Assoc. Nat. de Nice, 1915 p. 7 (extr.). — Maculis violaceo-brunneis, limitatis, sporis totum folii parenchyma implentibus, brunneis, subglobosis v. breviter ellipsoideis, subinde uno latere compressis, 26-30 μ diam.

Hab. in foliis *Narcissi Tazzetta* [Amaryllidaceae], in Alp. Marit. — Valde affine *Clad. Muscari* Poirault, Syll. XXI p. 486.

2. *Physoderma Zeae-Maydis* Shaw in Syd. et Butl., Ann. Mycol. X, 3385 1912, p. 245, fig. 2. — Maculas planas elongatas fuscas efformans; mycelio intra cellulas crescente; sporangiis perdurantibus pluribus in cellulis, fulvis, globosis v. ellipsoideis, 20-27 \times 18-24.

Hab. in nervo medio foliorum *Zeae Maydis* [Graminaceae], Duars, Bengala, Indiae or. (E. J. BUTLER).

3. *Physoderma Maydis* Miyabe in A. Ideta, Handb. of Plant Dis. Ja- 3386 pan 1909, Ed. 4., P. I, p. 114, fig. 119. — *Cladochytrium Maydis* Miyabe in Ideta, l. c. Ed. III, 1903, p. 75 (nomen nudum). — Tanaka, Mycologia 1922, p. 84. — Maculis numerosis parvis, orbicularibus, ellipsoideis v. linearibus, saepe confluentibus, brunneis v. fuliginis, ad marginem pallidioribus centro obscurioribus; spo-

rangiis ovato-ellipsoideis v. globosis, obscure brunneis, 24-26 \times 22-24.

Hab. in foliis culmisque nec non in vaginis bracteisque Zeae Maydis, et valde noxia, Japonia. — Verisimiliter est *Physoderma Zeae-Maydis* Shaw, ex Indiae or.

4. *Physoderma Myriophylli* (Rostr.) Vesterg., Rostr. et Lind, Dan. Fung. 3387 p. 52, f. 1 et t. I f. 5; *Cladochytrium Myriophylli* Rostr., Rev. Mycol. 1905 p. 164, Ferd. et Wingle, Mycol. Not. II p. 305 c. icon. — Tuberculis cauliculis, crassis, 1 cm. diam.; sporis creberrimis, tubercula implentibus, ellipsoideis, raro sphaeroideis, v. polyedricis, 25-40 \times 20-25, tunica brunneo-flava, 4 μ cr.

Hab. in caulibus vivis *Myriophylli verticillati* [Halorrhagidaceae], in Daniae pluribus locis. — Sporae partim ut perdurantes habendae, partim ut sporangia considerandae, in quibus sporae minutae, hyalinae, 6 μ diam. evolvuntur.

5. *Physoderma Ornithogali* R. Maire, Schedae Myc. Bor.-Afr. in Bul. 3388 Soc. Hist. Nat. Afrique du N., t. 10, 1919, p. 137. — Maculis rufo-brunneis, ambitu flavo-virentibus, amphigenis, subtumidis, oblongis, 3-8 mm. longis; cystis (chronizoocystis) in cellulis parenchymatis, rarius in cellulis epidermidis evolutis, plerumque 2-4 in quadam cellula, subhemisphaericis, 24-30 \times 20, episporio rufo-brunneo, 2 μ crasso, laxe foveolato praeditis, contentu aethereo, guttulis oleosis numerosis praeditis, faretis.

Hab. in foliis vivis *Ornithogali narbonensis* [Liliaceae], in Mauretania, Africa bor. (R. MAIRE). — *Ph. Urgineae* (Pat.) Maire proximum sed pluribus notis diversum.

6. *Physoderma deformans* Rostr., Rev. Mycol. 1886, p. 96 et in Rostrup-Lind, Dan. Fungi, p. 51, t. I f. 1. — Flores hypertrophicos, subcarnosos et monstrosos efficiens, staminaque sterilia rubentia v. virentia et pistilla monstrosa incrassata reddens; sporis intercellularibus globosis v. crasse ovoideis 12-16 μ diam., membrana crassa pallide flava; mycelio copiose evoluto, parvisse septato.

Hab. in floribus, caulibus, foliisque vivis *Anemones nemorosae* [Ranunculaceae], in Dania. — Plantae affectae diutius vivae persistunt.

7. *Physoderma Calthae* Bucholtz, Mat. Mycol. ins. Osiliae (Rossia), 3390 p. 6. — Acervulis gregariis, rotundis v. ellipsoideis, 1-2 mm. diam., epidermide tectis, cinnamomeis; sporis (sporangiiis?) ellipsoideis, 30-40 \times 23, intus granulosi, guttulis oleosis praeditis; episporio ochraceo 2,5 μ circ. cr.

Hab. in caulibus foliis fructibusque *Calthae palustris* [Ranunculaceae], in paludosis, Nawska ins. Osilliae, Rossia.

8. *Physoderma bohemicum* Sacc., Ann. Mycol. XII, 1914, p. 295. — 3391

Gregarium, punctiforme, brunneolum; sporangiis perdurantibus intracellularibus, ellipsoideis $35-40 \times 23-33$, dilute fulvis, episporio levi, subtili, $1-1,5 \mu$ cr. praeditis, junioribus hyalinis pluriguttatis.

Hab. in foliis petiolisque vivis *Calthae palustris*, Nechanice, Bohemia (E. BAUDYS). — Affine *Phys. vagante* et *Phys. Magnusiano*, dignoscitur sporangiis perdurantibus 1-paucis in quaque cellula matricis, paullo majoribus, et dilute fulvis. Sed verisimiliter non satis diversum a praecedenti.

UROPHLYCTIS Schröt. — Syll. VII p. 303, XVII p. 515, XXI p. 849.

1. *Urophlyctis Hymenoxidis* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 3392

Buenos Aires, XXIII p. 4 (1912). — Soris pusillis, parenchymate foliorum pallescentium innatis, sparsis, rufescentibus ex oogoniis paucis, hyalinis, globosis, $60-80 \mu$ diam. efformatis; oosporis solitariis subglobosis, saepius inferne umbonatis, subpiriformibus, 50μ circ. diam., tunica ferruginea levi tenui vestitis, endoplasmate nubilo hyalino repletis.

Hab. in foliis vivis *Hymenoxidis anthemoidis* [Compositae], in pratis circa La Plata, Argentina.

2. *Urophlyctis Lathyri* Björn Palm, in Svensk. Bot. Tidskr. Bd. 5., 3393

1911, p. 356, cum icon. — Pustulae in caulibus et in pagina superiore foliorum conspicuae, subglobosae. Sporangiis perdurantibus forma generis, brunneolis, plerumque $40-45 \mu$, in cellulis nidulantibus et eas maximas efficientibus. Sporangiis ephemeris nullis.

Hab. in foliis caulibusque deformatis *Lathyri montani* [Leguminosae], Ulriksdal prope Stockholm, et *Lathyri pratensis*, Stora Rör, Öland, Scandinavia.

3. *Urophlyctis ?linaricola* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 3394

Buenos Aires XXIII p. 3, c. ic. (1912). — Tumores subglobosos, $5-10$ mm. diam. botryose aggregatos, ex albo rubescentes vel viridulos ad collum radiceis inducens; sporis majusculis, lateritiis, levibus, globosis, $75-150 \mu$ diam., in capsula e cellulis parenchymaticis fusiformiter transformatis, $50-60 \times 12-15$, dense minuteque corrugatis compositis singulatim nidulantibus.

Hab. ad basin caulium *Linariae canadensis* [Scrophulariaceae], in dunis Ibicuy, Entre Rios, Argentina.

Fam. 4. Saprolegniaceae PRINGS. *)

PYTHIOPSIS De Bary — Syll. IX p. 346.

1. *Pythiopsis Humphreyana* Coker, Mycologia, 1914, p. 292, t. 148. — 3395

Hyphis sterilibus angustis, parce ramosis circ. 11-14 μ cr. ad insertionem sporangiorum v. oogoniorum validioribus, maturis mox subcolabescentibus; sporangiis variabilibus, sphaeroideis, ovoideis, piriformibus v. elongatis apice papillato dehiscentibus et e basi proliferantibus et tunc subcymosis; sporis piriformibus biciliolatis, 8-9 μ cr.; oogoniis conformibus et tunc praecipue juventute e sporangiis aegre distinguendis, apicalibus v. e latere subcymosis, magnitudine valde variabilibus 33-89 μ v. plerumque circ. 43 μ , tunica levi subaequali 1,4 μ cr. praeditis; oosporis plerumque singulis raro binis rarissime quaternis, 24-40 μ diam., tunica 2 μ circ. cr.; antheridiis breviter clavatis, pedicellis basi oogoniis valde approximatis v. subdistantibus, raro diclinis, singulis, binis v. quandoque plurimis juxta oogonium orientibus et apicibus oogonio adnatis.

Hab. Chapel Hill, Amer. bor. — *Pyth. cymosae* proxima.

SAPROLEGNIA Nees — Syll. VII p. 268, IX p. 345, XI p. 244, XIV p. 453, XVII p. 518, XXI p. 851.

1. *Saprolegnia variabilis* Minden, Krypt. Fl. Brandenb. V p. 524 (1912). — 3396

Fasciculis densis, hyphis pro ratione tenuibus, parce vel vix ramosis, mollibus constitutis; sporangiis primariis fusiformi-clavatis vel sphaeroideis, copiosissimis, 80 \times 60 vel 70 \times 57 circ., secundariis valde variabilibus, saepe in serie dispositis; oogoniis sphaeroideis, rarius plus minusve elongatis, 50-70 μ diam. vel 90 \times 70 vel etiam 60 \times 40, membrana crassa praeditis, indistincte punctulatis; oosporis 1-15, plerumque 4-8, sphaeroideis, 23-26 μ diam.; antheridiis non visis.

Hab. ad ova *Formicarum* terra uda diu servata, Hamburg in Germania. — Hyphae interdum in segmentis plus minusve co-

*) De nonnullis mycetibus aquaticis, cnfr. M. v. Tiesenhausen, Beitr. z. Kenntnis d. Wasserpilze der Schweiz. Inaug. Diss. Univ. Bern, 1911 et Archiv. f. Hydrobiologie u. Planktonkunde, Plön, Bd. VII, H. 2, 1912, pp. 261-308, 24 icon.

piosius divisus, ex quibus partim sporangia, partim oogonia, partim gemmae oriuntur. — Affinis *S. torulosae* et *S. moniliferæ*, forsitan identicæ cum *S. rhaetica* Maurizio, quae imperfecte descripta.

2. *Saprolegnia mixta* De By. — Syll. VII p. 270 — var. *Asplundii* E. 3397
Gäumann, Botaniska Notiser, 1918, p. 155. — A typo differt oosporis minoribus, modo 15-21, fere 16-19 μ latis.

Hab. prope Airavare, Suecia bor. (E. ASPLUND).

3. *Saprolegnia lapponica* E. Gäumann, Botaniska Notiser, 1918, p. 156. — 3398
Caespitulis mollibus, 1-2 cm. a muscis distantibus; hyphis gracilibus, erectis, parce ramosis, 8-14 μ crassis; zoosporangiis diam. fere paullo maiore partibus terminalibus hypharum; antheridiis absentibus; oogoniis lateralibus, breviter pedunculatis vel sessilibus, pedunculo saepe tubiforme in oogonium proliferum; diam. fere 45-75 μ ; foraminibus distinctis, impar frequentibus (v. c. 6-18 in oogoniis ejusdem hyphae); oosporis globosis vel late ellipsoideis, fulvis, 19-31, fere 21-24 μ diam., 1-18 in eodem oogonio nascentibus.

Hab. ad terram muscosam sub Nuolja monte, Lapponia, Europa bor. — *Saprol. Thurreti* De B. proxima nec non *S. esocinae* et *bo-danicae*.

4. *Saprolegnia monoica* De By. — Syll. VII p. 268 — var. *glomerata* 3399
Tiesenhausen, Beitr. Wasserpilze Schw., 1912, p. 277 fig. 6-8. — Caespitulis tenuibus, laxis, 1 cm. lat.; ramis lateralibus incrassatis, iterum divisus, varie curvatis et glomerulum parvum formantibus; sporangiis generis, interdum ex conidiis formatis, parvis piriformibus v. globosis; oogoniis 37-80 μ diam. pedicellis aequae ac ramulis sterilibus inaequaliter curvatis, saepe nodosis pluries ramosis; oosporis 22-24 μ diam., 1-23, typice 3-6 in quoque oogonio, antheridiis androgynis v. etiam diclinis.

Hab. in laculo, Riffelberg pr. Zermatt, Helvetiae. — var. *vexans* A. J. Pieters, Bot. Gaz., LX, p. 489 (1915). — A typo differt quia oogonia in muscis aliisque substratis culta non efformat; oogonia in decoctione pisi leucina et levulosis additis tantum evoluta. —

Hab. inter algas e Sukey Lake, Michigan, Amer. bor. — var. *turfosa* Minden in Krypt. Fl. Brandenb. V p. 516 (1912). — Oogoniis membrana valde incrassata, luteola praeditis, facillime perspicuis, plerumque in ramis brevibus, racemosis, dimidium oogonii diametrum saepe vix attingentibus, rarissime in hyphis ipsis insidentibus, 40-80 μ diam., plerumque 70 μ circ.; antheridiis ad quoque oogonium 1-2, e clavato-incurvis usque cylindraco-elongatis, ramis brevissimis e stipite oogonii, rarissime ex hyphis ipsis

nascentibus insertis; oosporis plerumque 15-30, raro minus, sphaeroideis, levibus, 20-25 μ diam.

Hab. ad fructus Mali et ad caules Visci, putrescentes, in Brandenburgia, socia *Aphanes*. — Sec. Cl. E. Gäumann (in Botaniska Notiser 1918, p. 153), varietas haec ut spec. habenda et tunc *Saprol. turfosa* (v. Mind.) Gaum. vocanda, cuius synonymia haec sistunt: *Sapr. paradoxa* Peters. 1909, nec *Sap. paradoxa* Maurizious 1899.

5. *Saprolegnia stagnalis* Tiesenhausen, Beitr. Wasserpilze Schw. 1912, 3400 p. 276. — Caespitulis laxis, 2 cm. lat., sporangiis plerumque medioeribus e gr. 260 \times 29, 500 \times 20, 720 \times 45, sed etiam 80 \times 20; sporangiis secundariis adnexis; oogoniis in hypha primaria et ejus ramulis, rarius et secundi ordinis acrogenis, interdum quoque intra vacuum sporangium v. binato seriatis; pedicello oogonii brevi et incurvo; oogoniis 25-80 μ diam., margine punctatis; oosporis typice concentricis 12-22,5 μ lat. rarius 32,5 \times 15, in quoque oogonio 1-12, saepius 1-2; antheridiis semper diclinis.

Hab. in stagno, alt. 1920 metr., pr. St. Moritz, Engadina sup. — Ab affini *Sapr. dioica* pluribus notis dignoscenda.

6. *Saprolegnia Kaufmanniana* A. J. Pieters, Bot. Gaz., LX p. 488 (1915) 3401 tab. 21 fig. 5-7. — Habitu vegetativo *S. feracis* simili, hyphis firmis, rigidis; sporangiis liberis illis *S. feracis* omnino similibus; gemmis globosis, ovoideis vel irregularibus, plerumque singulis, raro catenulatis; oogoniis majusculis ramulis plus minusve elongatis insidentibus, vel etiam intercalaribus, sparsis, ovatis vel clavatis, rarissime globosis, 100-250 \times 70-80, membrana tenui levi haud foveolata; oosporis 3-4 in oogoniis minoribus, in ceteris copiosioribus, usque ad 20-30, 30 μ circ. diam. protoplasmate granuloso eguttulato faretis; antheridiis plerumque praesentibus, diclinis, e clavato incurvis vel irregularibus, saepe binis vel pluribus pro quoque oogonio.

Hab. inter algas, laboratorio Universitatis cultas, Michigan, Amer. bor.

ACHLYA Nees — Syll. VII p. 274, IX p. 346, XI p. 245 et 658, XVII p. 518, XXI p. 852.

1. *Achlya asterophora* Minden, Krypt. Fl. Brandenb. V p. 549 (1912) 3402 fig. 2 c (p. 520). — Fasciculis spissis, ex hyphis usque ad 100 μ crassis; sporangiis ramorum sporangiferorum minus crassis; oogoniis terminalibus in ramis brevibus botryose dispositis, sphaeroi-

deis, spinis majusculis, cavis, conico-acutatis, interdum furcatis, 11-15 μ longis, plerumque dense distributis ornatis, 45-50 μ diam. (sine aculeis); antheridiis saepius per paria dispositis, rarius singulis, curvatis, clavatis, extremitate anteriore pariete oogonii adpressa; oospora typice unica (rarissime binis) sphaerica, 30-35 μ diam., matura guttulis oleosis variae magnitudinis excentrice coadunatis.

Hab. ad ramos aqua immersos, prope Hamburg, Germania. — Cum *Achlya racemosa* var. *spinosa* Cornu, cujus descriptio imperfecta, comparanda.

2. *Achlya ocellata* Tisenhausen, Beitr. Wasserpilze Schw., 1912 p. 287 3403
fig. 14. — Caespitulis, laxis, 3 mm. lat.; hypha primaria basi 175 μ cr., apice acuta; hyphis sterilibus saepe furcatis v. patenti-ramosis; sporangiis generis; oogoniis in hyphis plus v. minus incrassatis racemose digestis interdum intercalariis; pedicello rarius usque 62 μ longo, plerum oogonium vix aequante, interdum nullo; oogoniis globosis, subinde piriformibus, 40-118 μ long., membrana levi, punctata; oosporis 17-25 μ diam., guttula refringenti ocellatis, 5-20 in quoque oogonio; antheridiis ad ramulos 5-8 μ crassos, androgynis v. diclinis.

Hab. in lacubus pr. Campfér, in Engadina superiori.

3. *Achlya radiosa* Maurizio, Beitr. z. Biol. d. Saprolegnieen in Ztschr. 3404
f. Fischerei etc., Mitt. d. deutsch. Fischerei-Ver., VII Jahrg., p. 2., Berlin 1899, p. 1-66; Tiesenhausen, l. c. p. 283, fig. 10-13. — Syn. ? *Achl. decorata* Peters., ? *A. racemosa* var. *spinosa* Cornu. — Hyphis mycelicis crassis, basi quandoque usque 140 μ cr. apicem versus usque 60 μ ; sporangiis plerumque pleurogenis subcylindraceis 240- \times 23; oogoniis sparsis v. dense racemosis plus minus longe pedicellatis, pedicellis 15-95 \times 10-12,5 v. 50-80 \times 7-10, globosis 55-63 v. usque 75 μ diam., emergentiis mamillato-acuminatis 12-20 μ altis; parietibus oogonii plus minus intense flavis; antheridiis e pedicello oogonii 1-2, v. pluribus efformatis, 10-13 μ cr., in pedicello proprio circ. 5 μ cr. vix articulatis.

Hab. ad frustula organica dejecta, Helvetia (Berna, Engadina) alioque.

4. *Achlya* De Baryana Humphrey. — Syll. XIX p. 6, XXI p. 854 — 3405
var. *intermedia* Minden, Krypt. Fl. Brandenb. V p. 545 (1912). — A typo differt ramulis lateralibus saepe ex pedicello oogoniali nascentibus, valde elongatis et ramosis; membrana oogoniorum indistincte punctulata vel etiam omnino levi.

Hab. in stagnis prope Lüneburg, Germania et diu ad ova *Formicarum* culta.

5. *Achlya paradoxa* W. O. Coker, *Mycologia*, 1914, p. 283, t. 146 f. 3406 1-6. — Planta delicata; hyphis rectis, angustis, ramosulis, latioribus $37\ \mu$ cr., nonnullis etiam angustioribus et circ. $10-15\ \mu$ cr.; sporangiis semper copiosis, anguste clavulatis v. cylindraceis, apicem versus rotundatis et $55\ \mu$ diam. ibique distincte breviterque papillatis; sporangiis secundariis subfasciculatis nonnullis contentu destitutis; sporis laxè polystichis, omnibus ciliatis; oogoniis apice ramulorum lateralium insertis quandoque ad basim hypharum primariorum quandoque intercalaribus; tunica levi aequali; oosporis plerumque binis, saepe quaternis raro singulis v. octonis, $22-37\ \mu$ diam. (plerumque 30); antheridiis semper praesentibus et pluribus juxta oogonium, breviter clavatis, ad apicem ramulorum tenuiorum saepe circinnantibus circa stipitem oogonii ortis.

Hab. Chapel Hill, Amer. bor.

6. *Achlya glomerata* W. O. Coker, *Mycologia*, 1912, p. 325, t. 79. — 3407 Hyphis ramosis subobtusis brevibus $40-45\ \mu$ cr. sursum sensim tenuatis et circ. $12\ \mu$ cr.; zoosporangiis cylindraceis et subinde irregularibus saepe papilla oblique dehiscens; oogoniis copiosis sphaeroideis verrucis irregularibus obtusis omnino tectis; oogoniis singulis v. racemosis; oosporis singulis v. rarius binis in quoque oogonio, $15-23\ \mu$ diam.; antheridiis (plerumque deficientibus), clavato-cylindraceis in apice ramulorum ex eodem glomerulo et singulis v. pluribus quoque oogonio adnexis.

Hab. in aquis, Lone Pine Spring et Lone Pine Hill, prope Chapel Hill, North Carolina, Amer. bor.

7. *Achlya klebsiana* A. J. Pieters, *Bot. Gaz.*, LX, p. 486 (1915) tab. 21 3408 fig. 1-4. — Hyphis rigidis, medio incrassatis, aliis latis, ramosis, $10-15\ \text{mm.}$ et ultra longis intermixtis; sporangiis cylindraceis sporangia secundaria saepe efformantibus; oogoniis in ramulis brevibus lateralibus diametrum oogonii aequantibus insidentibus, raro in apice hypharum elongatarum, nunquam intercalaribus, globosis vel late ovoideis, levibus, oosporis $4-10$, excentricis, $25\ \mu$ diam.; antheridiis origine diclinis oogoniis pro parte adpressis nunquam clavatis nec oogonia involventibus; gemmis catenulatis, ex articulis hypharum vesiculososis interdum breviter ramosis vel papillatis efformatis.

Hab. inter algas in Michigan, Amer. bor.

BLEPHAROSPORA Petri, Rend. Accad. Linc. 1917, p. 297. — Mycelium diu unicellulare dein (cultura) pluricellulare intercellulare et intracellulare, parasiticum. Corpuscula (zoosporangia) sphaeroidea dein piriformia, ovalia v. citriformia, papillata, contentu granuloso, mox pluries partito et sporas (zoosporas) gignente. Sporae sphaeroideae hinc conico-productae, primitus immotae, dein sub luce et tepore mobiles et cilia longa bina gerentes.

1. **Blepharospora cambivora** Petri l. c. et in Ann. R. Ist. sup. forest. naz. 3409 vol. III, 1918 Extr. p. 3 et seqq., cum fig. et tab. IV. — Characteres generis, zoosporangia primum sphaeroidea dein ovoidea, piriformia v. citriformia, juniora 18-25 × 12-25, matura 60-75 × 40-54; zoosporae numero 8-10 usque ad 22 in quoque zoosporangio, modo immobiles subsphaeroideae papillatae, modo mobiles et ciliis binis praeditae, 12-15 μ diam., cilia praelonga filiformia sensim tenuata sinuosa, zoosporā duplo triplove longiora.

Hab. in stratu medio (*cambio*) trunci *Castaneae vescae* cui, teste auctore, affert morbum *dell'inchostro*, in Italia. Zoosporae ubi fixantur cilia amittunt et germinant.

PYTHIUM Pringsh. — Syll. VII p. 270, IX p. 347, XI p. 244, XIV p. 455, XVI p. 895, XVII p. 518, XXI p. 854.

1. **Pythium conidiophorum** M. Jokl, Oesterr. bot. Ztschr. 67., 1918, 3410 p. 33, tab. I (absque diagn.). — Mycelio hinc inde ramoso, continuo, 2-6,3 μ cr., in cellulis plus minus copiose evoluto, et hinc inde e parietibus cellularum exeunte et hyphis lateralibus usque 100 μ long. emittente; sporangia nulla, sed conidia sphaeroidea 8-11, v. usque 20 μ diam., extus efformante, maturitate secedentia et hyphas mycelicas 1-2-3 emittentia; oogonia vix evoluta, verisimiliter omnino intercellularia, sphaeroidea 6,3-15,9 μ diam. (sed matura ?); antheridia non visa.

Hab. in cellulis *Spyrogyrae dubiae*, communis, variantis, in Lacu Scutari, Albania. — *Pyth. dictyospora* et *gracile* verisimiliter affine.

APHANOMYCES De Bary — Syll. VII p. 276, XVI p. 393, XXI p. 854.

1. **Aphanomyces helicoides** Minden, Kryptog. Fl. Brandenb. V p. 559 3411 (1912). — Fasciculis albis, 1 cm. usque latis, ex hyphis 5-8 μ crassis constitutis; sporangiis apicalibus, filiformibus zoosporis monoseriatis continentibus, sporangiis secundariis paucis cymose dispo-

sitis; oogoniis terminalibus, raro intercalaribus, ramis brevibus fultis, plus minusve sphaericis, pariete levi, crassa, 23-38 μ diam.; antheridiis majusculis, saepe longe cylindraceis, plerumque plurimis ad quoque oogonium eumque ramis lateralibus demum brunneis et deciduis spiraliter involventibus; oospora singula, sphaERICA, 23-27 μ diam. guttulis oleosis, non semper bene distinctis, lateraliter positis.

Hab. simul cum aliis Saprolegniaceis, et diu ad ovos Formicarum culta, Hamburg, Germania. — Ab *A. laevi* De By. cui certe affinis, differt ramulis lateralibus antheridiorum oogonia vel etiam hyphas longe spiraliter involventibus.

APODACHLYA Pringsh. — Syll. XI p. 245.

1. *Apodachlya punctata* Minden, Krypt. Fl. Brandenb. V p. 586 (1912), 3412
fig. 15 (p. 580). — Mycelio longe filiformi, fasciculis fluctuantibus albis efformante, ex hyphis ramosis, longe segmentatis constituto; sporangiis terminalibus atque e gemmatione sympodiale lateraliter nascentibus, clavatis, ovoideis, piriformibus vel subglobois, collo plerumque lateraliter inclinato; sporis hibernantibus apice hypharum elongatarum vel in ramis lateralibus segmentorum brevium insidentibus, sphaeroideis, membrana crassa bistratosa, strato interno regulariter minute punctato.

Hab. ad ramos et caules putrescentes, Breslau et Hamburg in Germania.

2. *Apodachlya pirifera* Zopf. — Syll. XI p. 245 — var. *macrosporangia* 3413
Tiesenhausen, l. c. p. 298, fig. 19. — A typo recedit hyphis 5-15 μ (nec 4-10 μ), articulis 70-430 μ long., sporangiis 37-50 μ long. (nec 12-24 \times 12-20); conidiis 25-33 μ diam. (nec 16 μ).

Hab. ad acus Piceae excelsae in aqua dejectos, Hinterburgsee Stockhornkette, « Berner Oberland », 1525 m. alt., Helvetia.

3. *Apodachlya brachynema* (Hild.) Pringsh. — Syll. VII p. 265 (*Lep- 3414*
tomitus) — var. *major* Tiesen., l. c. p. 298 fig. 20. — A typo differt hyphis 6-13 μ cr. (nec 4-6 μ), articulis 15-537 μ long.; sporangiis majoribus 40-52 μ (nec 12-22 μ).

Hab. ad terram humosam udam prope Zollikofen, Bern, Helvetia.

RHIPIDIUM Cornu. — Syll. VII p. 268, XIV p. 454.

1. *Rhipidium Thaxteri* Minden, Krypt. Fl. Brandenb. V p. 600 (1912). — 3415
Cellula basali usque ad 800 μ diam. et ultra, interdum monstrose

discoidea, lobis usque ad 200 μ latis, filis rhizoidalibus copiosis substrato penetrantibus, hyphis e cellula basali ortis 1,5 tantum quam ea longis, 7-11 μ crassis, in aqua fluctuantibus, non segmentatis sed basi constrictis; sporangiis elongato-ellipsoideis, 50-55 \times 20-35, saepe e gemmatione sympodiali ortis; oogoniis majusculis, irregulariter sphaericis vel piriformibus, apice tennatis et late rotundatis, saepe pedicellatis, 57-62 \times 45-57 (sine pedicello); antheridiis majusculis, 50-70 \times 7-11, irregulariter clavatis, tota longitudine oogonio adnatis, in ramis tenuibus lateralibus, irregulariter ramosis e cellula basali inter oogonia orientibus sitis; oospora unica, majuscula, sphaeroidea, crasse tunicata, superficie areolata, 40-50 μ diam.

Hab. ad fructus et ramos *Alni*, in ins. Waltershof flum. Elbae in Germania. — Characteres fructificationis quasi medii inter *Rhipidium* et *Sapromyces*.

BLASTOCLADIA Reinsch. — Syll. XI p. 245, XIV p. 456.

1. **Blastocladiæ strangulata** J. E. Barrett, Bot. Gaz. LIV (1912) p. 353, 3416 tab. 18-20. — Axi primario ex ovato cylindræo, basi filamentis rhizoideis copiosis, ramosis instructo, sursum copiose dichotomo vel subdichotomo-ramoso, ad basim ramorum pseudoseptato; zoosporangiis ovatis vel sphaeroideis 50-63 \times 40-52, papillas dehiscences paucas ferentibus; zoosporis ovoideis, 12 \times 8, cilio plerumque simplici ornatis; sporangiis hibernantibus rotundatis, basim versus gradatim angustatis et truncatis, 45 \times 35, zoosporas foventibus

Hab. ad *Aphides* in aqua, Ithaca N. Y., America boreali.

2. **Blastocladiæ rostrata** Minden, Kryptog. Fl. Brandenb. V p. 604 3417 (1912). — Axi primario ex hyphis 1-1,5 mm. longis, cylindricis, non vesciculososis, superne dichotomo-vel irregulariter ramosis, ramis iterum copiose divisiss, apice non capitato-inflatis constituto; hyphis sterilibus nullis; sporangiis plerumque subspiraliter dispositis, e cylindræo fusoides, 70-100 \times 20-30; sporis hibernantibus ellipsoideis, basi lata, apice rostrato, 40-53 \times 25-30, membrana crassa sed tenuissime punctulata, bistratosa, maturitate strato externo deciduo et spora strato interno extus verruculoso tantum cincta.

Hab. ad fructus putrescentes aqua immersis, in ins. Waltershof flum. Elbae prope Hamburg, Germania.

3. **Blastocladiæ prolifera** Minden, Kryptog. Fl. Brandenb. V p. 606 3418 (1912). — Axi primario 170 \times 80, plerumque late cylindræo, apice in filamentis plus minusve copiosis varie distributis scisso, qui

sporangia copiosa ferunt; sporangiis cylindraceis, saepe curvatis, lata basi adnexis, apice attenuatis ibique obtuse papillatis, 80-150 \times 15-30, post evacuationem zoosporarum pluries proliferantibus; sporis hibernantibus non visis.

Hab. ad fragmenta plantarum emortuarum, Dover Elbe prope Hamburg, Germania.

RHEOSPORANGIUM Edson, Journ. Agricult. Research, v. IV, n. 4., p. 291, (1915). — Mycelium aereum v. aquaticum bene evolutum, non septatum, ramosum. Multiplicatio aquatica, per zoosporas et per oosporas. Prezoosporangia terminalia e mycelio plus minus inflato et contorto efformata. Sporangia tenuiter tunicata, e apice lacerato presporangia erumpentia et zoosporas efformantia.

1. **Rheosporangium aphanidermatus** Edson, l. c. p. 291, tab. XLIV- XLVIII (1915). — Mycelio vegetativo albo, in aqua hyalino, primum continuo ad fructificationem septatum, ramosum, minute granuloso, saepe cursus protoplasmatis exhibenti; hyphis junioribus 2,8-7,3 μ cr. plerumque 4-6 μ sed ad fructificationem crassioribus. Presporangiis e simplicibus et irregulariter clavatis usque ramosis 50-1000 μ long., 4-20 μ latis; sporangiis membrana flexibili subinconspicua, ex apice erumpentia, subsphaeroidea, magnitudine variabilia. Zoosporis e sporangiis ruptis exeuntibus, plano-convexis, vacuolo unico centrali praeditis, 12 \times 7 crassis, infra in parte concava cilia 2 inaequalia praeditis. Oogoniis terminalibus, sphaeroides 22-27 μ diam.; antheridiis terminalibus v. intercalaribus, suborbicularibus, demum cylindraceis v. late clavatis, 10-14 \times 9-11. Oosporis singulis levibus v. inaequalibus circ. 17-19 μ cr.

Hab. ad terram, in radicibus plantulae *Betae vulgaris* et *Raphanistrivi*, America bor.

ALLOMYCES Butler, Phycomyc., in Ann. of Bot. XXV 1911 p. 1027. — (Etym. *allos* et *myces* fungus). — Fungus arbusculaeformis, cellula basilari unica rhizoidibus subtilibus ramosis suffulta praeditus, supra cellulam breviter furcatus, indeque in ramulos angustos fertiles radiatim divergentes v. cellulae perdurantes partito; ramuli septati, sympodialiter v. dichotome divisi. Sporangia acropleurogena, solitaria v. catenulata, ovoidea, papillis evacuationis munita; zoosporae singulatim emergentes oblongae v. ellipsoideae, 1-ciliatae, initio amoeboidae, inonoplaneticae. Sporae perdurantes ovoideae,

crasse tunicatae. Germinatio non visa. Membranae omnes cellulosa carentes.

1. *Allomyces arbuscula* Butl., l. c., cum tab. — Cellula basilari 100-200 3420
 \times 60-100; ramuli fertiles 250 \times 15-25; sporangia 40-70 \times 30-40,
 utrinque retundata v. truncata, papillis 1-4 evacuationis munita;
 cellula perdurans, singula, terminalis basi truncata apice rotundata,
 40-60 \times 30-45, exosporio crassiusculo, brunneo.

Hab. in aqua (non stagnante), Pusa et Poona, Ind. or., ad Muscas etc. emortuas. — Habitus quasi *Saprolegniae*.

ZOOPHAGUS Sommerstorff, Oesterr. Bot. Zeitschr. LXI, 1911, p. 361 n. 10, p. 12 extr. — Hyphae cylindricae, rectae, rigidae, typice simplices et continuae, lateraliter ramulos breves perpendiculariter insertos gerentibus. Fructificatio distincta nulla adhuc observata. Aquaticus, inter algas nidulans, animalcula rotatoria ramis suis brevibus captans.

1. *Zoophagus insidians* Sommerst., l. cit., tab. 5-6; Mirande, Bull. Soc. Myc. de Fr., t. 36., 1920, p. 47, cum icon. — Hyphis cylindricis, rectis, aequalibus, 6-7 μ diam., rigidis, typice simplicibus, continuis vel, ubi plasmate elapso, septis curvulis partitis, ramulos breves laterales plus minusve perpendiculariter insertos gerentibus; ramulis breviter cylindraceutis, subaequalibus, 20 \times 3, apice substantia granulosa valde refringente repletis, animalcula (Rotatoria) captantibus et in eorum corpore irregulariter abunde crescentibus. Fructificatio nulla distincte visa. 3421

Hab. in aqua inter *Cladophoras*, eisque saepe adhaerens, prope Gratwein in Styria (SOMM.) et in horto bot. Gratz, Austria (PALLA).

JARAIA Némec, Zur Kenntnis der niederen Pilze. VI. Eine neue Saprolegniaceae Bull. internat. Acad. Sci. Bohême 18. Praga 1913, p. 18-31. — Zoosporangia formae variabilis, in eminentias ostiolarum cylindraceutas plerumque 2 vel 3-6, hinc inde producta. Antheridium late in oogonio penetrante. Mycelium radicicolum parasiticum intercellulare.

1. *Jaraia Salicis* Némec, l. cit., cum tab. et icon. — Zoosporangiis immersis parvis, magnitudine et forma variabilibus, numerosis, ex hyphis consequenter formatis; oogoniis collo ostiolari destitutis et tunc oosporis ob lacerationem oogonii emissis. Fructificatio in stratu meristemali ad apicem radicis. 3422

Hab. in apicibus radicalibus hypertrophicis Salicis purpureae, aqua immersis, in Bohemia.

ANISOMYXA Némec, Zur Kenntnis der niederen Pilze V., in Bull. Int. Ac. Sc. Bohême, 18., Praga 1913, p. 18-31. — Status vegetativus intracellularis plasmodiiformis juventute uninucleatus, deum multinucleatus, soros zoosporangiferos efformans; zoosporae uniciliatae. — Gen. *Rhizomyxa* Borzi proximum et *Serolpidio* etiam nonnullis notis affine.

1. *Anisomyxa Plantaginis* Némec, l. c., cum tab. et icon. — Zoosporangiiis rotundatis, autumno parvis, $5,8 \times 5,8-7,2$, pseudoparenchymam simulantibus; aestate majoribus et magnitudine variabilibus $4,5-6 \times 10,5-15$; zoosporis rotundatis $1,5 \times 1,5-1,8$. 3423

Hab. in radicibus *Plantaginis lanceolatae*, Bohemia.

Genus incertae sedis et nomine nobis tantum notum.

1. *Enterobryus compressus* R. Thaxter, Bot. Gazette 69., 1920, p. 24, tab. V fig. 47-52. — E hyalinus pallide sordide flavescent; cellula basali magna et crasse tunicata, parte distali latiori, $500-850 \times 28-35$, recta v. saepe basi leniter curvata; pedicello e cellula basali bene definito, leniter brunneo flavescenti; cellulis superioribus articulatis, cellulis singulis articulis e quarto v. quinto sensim ad apicem latioribus et subcompressis (singulis circiter 8μ altis, 35μ latis, 18μ crassis), omnibus spora solitaria repletis. 3424

Hab. in regione auali *Passali* sp., Dominica, America.

Fam. 4. Peronosporaceæ DE BARY

CYSTOPUS Lév. — Syll. VII p. 233, IX p. 340, XI p. 242, XIV p. 458, XVI p. 396, XVII p. 519, XXI p. 858.

1. *Cystopus austro-africanus* (H. et P. Syd.) Sacc. et Trott., *Albugo austro-africana* H. et P. Sydow, Ann. Mycol. X, 1912, p. 437. — Soris amphigenis, plerumque epiphyllis, rotundatis v. ellipticis minutis, $0,5-1$ mm. diam., flavidis; conidiophoris late clavatis, hyalinis, $35-42 \times 16-18$; conidiis hyalinis v. dilute flavidis, ubique aequaliter tenuiterque tunicatis, globosis v. subglobosis, $14-20 \mu$ diam.; terminalibus majoribus $20-24 \times 16-21$, membrana $1-2 \mu$ cr.; oosporis 3425

ris in contextu foliorum evolutis, globosis, castaneo-brunneis, ca. 50 μ diam., papillis minutis aequaliter denseque obsitis.

Hab. in foliis *Aizoi rigidi* [Aizoaceae], Humewood Port Elizabeth, Cape Prov., Africa austr. (E. M. DOIDGE). — *Cyst. Lepigoni* proximus sed differt oosporis obscurioribus et conidiis minoribus.

2. *Cystopus Eurotiae* (W. Tranzsch.) Sacc. et Trott., *Albugo E.* Tranzsch., Mycoth. Ross. fasc. III-IV, an. 1911, n. 101. — Sori hypophylli, rotundati, sparsi, rarius confluentes, albid. Conidiophori clavulati, circa 30 \times 15. Conidia subglobosa vel late ovata, 16-22 16-18 μ , membrana hyalina, tenui, ad medium intus annulo leniter incrassato, non semper bene conspicuo, cincta. Oosporae follicolae, globosae, brunneae, maturae fere opacae, 39-55 μ diam., a superficie visae verrucis magnis, irregularibus, angulatis, reticulatim confluentibus separatis, tectae; sub his verrucis epispodium minute denseque verruculosum apparet (oosporae juniores tantum verruculosae sunt); in sectione optica epispodium e baculis brunneis dispositis constructum apparet, quae bacula verrucis claviformibus, in parte superiore dilatata dilutius coloratis et extra plus minus concavis superata sunt.

Hab. in foliis vivis *Eurotiae ceratoidis* (L.) C.A.M. [Chenopodiaceae], in prov. Ufa, Rossiae orientalis, prope Durassowo, (Serebriankow).

3. *Cystopus Evansii* (H. et P. Syd.) Sacc. et Trott., *Albugo Evansii* H. et P. Sydow, Ann. Mycol. X, 1912, p. 437. — Soris follicolis v. saepissime cauliculis, rotundatis v. in caulibus oblongis, circ. $\frac{1}{2}$ -1,5 mm. long.; conidiophoris oblongo-clavatis, 35-45 \times 14-17, hyalinis; conidiis subglobosis, ovatis v. oblongis, hyalinis, 16-28 \times 13-20, membrana ad medium annulatim incrassata; oosporis nondum visis.

Hab. in foliis caulibusque *Nemesiae* sp. [Scrophulariaceae], Hoogfontein, Ladybrand, Africae austr. (C. P. VAN DER MERWE).

*) **PHYTOPHTHORA** De Bary. — Syll. VII p. 237, IX p. 341, XVI p. 396, XXI p. 859.

*) Cfr. WILSON, *Monogr. Phytopht.*, in « Mycologia » 1914, p. 54. ROSENBAUM, *Studies of the genus Phytophthora*, in Journ. of Agricult. Research, Washingt., Febr. 1917, v. VIII, p. 233-276, tab. 71-77.

Conspectus synopticus et systematicus specierum plurimarum
gen. *Phytophoræ*, sec. Cl. ROSENBAUM in l. c.

I. Oogonia antheridio plerumque lateraliter disposito praedita

Typ. PH. CACTORUM

- A. Papilla apicali non prominenti sed lata et depressa; conidia circ. $39,86 \pm 25,33$, oosporae $29,5 \mu$ circ. cr. *Ph. Syringae*
- B. Papilla apicali prominenti.
1. Chlamydosporae nullae; moda conidiorum $32-35 \pm 25-26$.
* Oosporarum moda $29-86$, diam. circ. $30-22$ *Ph. Fagi*
** Oosporarum moda 26 , diam. circ. 27 *Ph. Cactorum*
 2. Chlamydosporae copiosae; moda conidiorum $37-38 \pm 29-30$.
* Chlamydosporarum moda $28,86 \pm 13,15$; conidiorum ratio circ. $1,25$ *Ph. Nicotianae*

II. Oogonia antheridio plerumque basi disposito praedita Typ. PH. PHASEOLI

- A. Conidiorum ratio ultra $1,75$.
1. Conidia circ. $43,64 \pm 23,39$ chlamydosporae circ. $31,15 \mu$ diametro *Ph. parasitica*
- B. Conidiorum ratio infra $1,75$.
1. Conidia parva, infra 30 ± 20 .
* Oospora in culturis copiosa, antheridia adsunt *Ph. Phaseoli*
** Oospora in culturis nulla, v. pauca et tunc antheridiis destituta v. antheridio indefinito praedita *Ph. infestans*
 2. Conidia magna, ultra 30 ± 20 .
* Papilla apicali non prominenti sed lata et depressa
Oosporae $35,78 \mu$ circ. cr.; conidia circ. $47,93 \pm 26,20$. *Ph. erythroseptica*
** Papilla apicali prominula; oosporae $32,42 \mu$ cr. conidia circ. $44,65 \pm 29,45$ *Ph. Arecae*

III. Antheridia v. situ ejusdem hucusque ignoti; chlamydosporae praesentes v. nullae

Typ. PH. FABERI

- A. Chlamydosporae latae, diam. ultra 35μ .
1. Chlamydosporae diam. circ. $38,93$ praeditae; conidiorum ratio $1,47$ *Ph. Faberi*
- B. Chlamydosporae parvae, diam. infra 35μ .
1. Chlamydosporae diam. circ. $32,89$ praeditae; conidiorum ratio $1,28$. *Ph. Jatrophae*

1. *Phytophthora Agaves* Gandera, Mem. y Rev. Soc. Cient. « Ant. Al- 342
zate » t. 25, 1908-1909 [1909], pp. 293-305, icon. et tab.

Hab. in foliis *Agaves* [Amaryllidaceae], in Mexico. Amer. bor.

2. *Phytophthora Allii* K. Sawada, Mycologia 1917, p. 249 (Ex Rep. Stat. 3429 Agric. Taiwan (Formosa) p. 77, tab. 1-2. — Mycelio byssino albo; hyphis filiformibus, tenui-tunicatis, hyalinis, demum septulatis, valde ramosis, 3-8 μ cr., cellulas matricis penetrantibus; haustoriis non visis; conidiophoris filiformibus simplicibus v. pseudo dichotome ramosis, 140-480 \times 4-6; conidiis terminalibus globosis v. ovoideis v. limoniformibus, hyalinis, papillatis, papilla 5-10 μ long., 50 \times 36, basi non v. crasse 1-septatis, demum 15-60 zoosporas gignentibus; oogoniis sphaericis, 20 μ d. monosporis; oosporis sphaericis, hyalinis v. pallide melleis 16-17 μ d., tunica 0,5-1,5 μ cr.; antheridiis 8-18 \times 10-14.

Hab. in foliis et floribus *Allii fistulosi*, in Ins. Formosa (K. SAWADA).

3. *Phytophthora palmivora* (Butl.) Butler, Scient. Rep. Agric. Res. Inst. 3430 Pusa, 1918-1919 [1919], p. 82.

Ita vocandum est *Pythium palmivorum* Butl., Syll. XXI p. 855.

4. *Phytophthora terrestris* Sherbakoff, Phytopath. VII (1917) p. 127, 3431 cum ic. — Mycelio primo continuo deinde septato; conidiis fere terminalibus, aliquando intercalariis, plerumque ovoideis apice papillatis sed valde variabilibus, 36-46 \times 24-35; zoosporis late ellipsoideis, asymmetricis, lateraliter 2-ciliatis, 9-11 μ diam., quiescentibus globosis; chlamydosporis vulgaribus, plerumque globosis, 30-40 μ diam.; oogoniis sphaeroides, 19-24 μ diam., basi per antheridium subglobosum penetratis; oosporis globosis 18-21 μ diam.

Hab. parasitice in fructibus *Lycopersici* esculenti, in truncis *Citri* et in caulibus *Lupini*, nec non aperte in solis humosis, Florida, Amer. bor. — Culta in agaro farina *Maydis* composito, colonias peculiariter cristatas efficit.

5. *Phytophthora Nicotianæ* Breda de Haan, Med. int's Lands Plantentuin 15., 1896, 107 p., 1 tav. — A *Ph. omnivora* de Bary prae-cipue biologice diversa quia tantum in *Nicotiana* viget.

Hab. in foliis caulibusque nec non in radicibus *Nicotianæ Tabacæ*, cui valde noxia, in ins. Sumatra, Java, Borneo.

6. *Phytophthora Melongenæ* K. Sawada, Mycologia 1917, p. 249 (Ex Rep. Agric. Stat. Taiwan (Formosa) p. 59 tab. 1-2. — Hyphis continuis, cellulas matricis penetrantibus, valde ramosis, maturis septatis; hyphis aereis plerumque simplicibus, praelongis, 4-8 μ cr., basi contorta inflata v. brevi-ramosa; haustoriis nullis; conidiophoris vix diversis, brevioribus 80 \times 3-5; conidiis sphaericis ovoideis 23-72 \times 20-48, plerumque 42 \times 33, apice papilla hemisphaerica

3-5 μ alta praeditis, usque ad 40 zoosporas gignentibus; zoosporis ovoideo ellipsoideis 10-11 \times 8 biciliatis; chlamydosporis flavido brunneis, sphaericis, 25-42 μ d.; oogoniis sphaericis 18-23 \times 20-24, monosporis; oosporis globosis 17-21 μ d., tunica 2 μ cr., hyalina v. brunnea; antheridiis subsphaericis 12-16 \times 10-14.

Hab. parasitica in fructibus Solani Melongenae, in Ins. Formosa (K. SAWADA).

7. *Phytophthora erythroseptica* Pethyb., On the rotting of Potato tubers, in Scienc. Proc. R. Dublin Soc. n. s. XXIII p. 529-565, t. 42-44 (1913). — Mycelio ut *Ph. infestantis*, sed conidiis majoribus brevius papillatis; ovoides v. obpiriformibus (ob subapicali constrictionem), 30 \times 20; gametis ex hyphis separatis, primitus minus distinctis; oogoniis 36 μ diam. tunica hyalina praeditis; oosporis 29-30 μ diam. hinc multo minoribus quam *Ph. infestantis*.

Hab. in tuberibus Solani tuberosi, quae colore rubro tinguntur in Europa et Amer. bor.

8. *Phytophthora Caricae* K. Hara, Morbi arbor., fr. Jap. p. 432, fig. 57. — 3435
Mycelii hyphis ramosis angustis, haustoriis carentibus; conidiophoris aequae ac mycelio 3-4 μ cr.; conidiis limoniformis, oblongis v. ovoideis, 40-87 \times 15-25, hyalinis, papilla prominenti auctis, germinatione 8-10 zoosporas emittentibus; oosporis ignotis, chlamydosporis globosis, 20-30 μ diam., granulosis, flavidis.

Hab. in fructibus Fici Caricae, Prov. Musashi, Tokyo Japoniae.

9. *Phytophthora parasitica* Dastur., Mem. Dep. Agr. India Bot. Ser. V, 1913 p. 226 tab. 1-X. — Maculis amphigenis, orbicularibus, centro arescentibus, dilute umbrinis, anulatis, solitariis v. confluentibus; mycelio intermatricali ex hyphis inter-et intracellularibus, primo continuis tandem septatis 3-9 μ cr. constantibus; haustoriis sparsis, digitatis v. subglobosis, raro ramosis, sporangiophoris, 100-300 μ longis; sporangiis terminalibus, interdum intercalaribus v. lateralibus, plerumque ovoideis, subinde globosis, 25-50 \times 20-40; zoosporis 8-12 \times 5-8; sporis perdurantibus globosis, flavidis, 20-60 μ d., membrana crassa, levi; oogoniis et antheridiis in vitro cultis; oogoniis intercalaribus v. lateralibus, globosis, levibus v. rugosis, melleis 18-25 (medie 23,8) μ diam. pedicellis per antheridia penetrantibus; oosporis globosis, 15-20 (medie 18,6) μ diam., membrana crassa, mellea, levi.

Hab. in foliis seminibusque Ricini communis et Sesami indici, in India orient.

STIGEOSPORIUM West, Ann. of Bot. XXX n. 118, p. 357 (1916), v. XXXI n. 121, p. 95 cum icon. (1917). — Mycelium ramosum ex hyphis inter-et intracellularibus continuis rarissime septatis constans; haustoriis numerosis, extremitatibus in ramulis radiatis valde dissectis; sporis perdurantibus solitariis plerumque globosis raro subglobosis et cat., membrana crassissima irregulariter intenseque colorata. — Differt a *Phytophthora* cui arcte affine, habitu symbiotico qua de causa nulla conidia normalia producuntur.

1. **Stigeosporium Marattiacearum** West, l. c., cum icon. et tab. III. — 3437
Hyphis primum hyalinis demum flavo-brunneis vacuatis 1-12 μ cr.; sporis v. intercalaribus v. terminalibus plerumque globosis 32-45 μ diam., raro subglobosis v. ovoideis v. piriformibus; exosporio tenuissimo hyalino levi, mesosporio crassissimo, 6 μ crassitudine, minute punctulato flavo irregulariter intenseque colorato, endosporio tenue 2,5 μ cr.

Hab. in radicibus subterraneis symbiotice in mycorrhizis, Marattiacearum orientalium e gen. *Angiopteris*, *Archangiopteris*, *Kaulfussia*, *Marattia*, Asia orientali, Australasia, Zeylanica.

PERONOSPORA Corda — Syll. VII p. 244, IX p. 342, XI p. 243, XIV p. 458, XVI p. 397, XVII p. 521, XXI p. 862.

1. **Peronospora Pulmonariae** E. Gäumann, Bull. Soc. neuchâtel. Sc. Nat. 3438 t. XLIII, 1919, Extr. p. 8, fig. 3; Mitt. Naturf. Ges. Bern. 1919 [1920], p. 179. — Caespitulis mollissimis, griseo-albis, difficile visibilibus, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis e stomatibus exeuntibus, 200-400 μ altis, trunco 9-12 μ crasso, basi leviter tumida; conidiis paene globosis, hyalinis, 21-36, fere 25-30 longis, 20-32, fere 24-29 μ latis. Longitudine media 28,03 μ , latitudine media 26,46 μ . Oosporis ignotis.

Hab. in foliis vivis *Pulmonariae officinalis*, Gallia septentrionali. — *Per. Echinospirmi* Sw. proxima.

2. **Peronospora Speculariae** E. Gäumann, Bull. Soc. neuchâtel. Sc. Nat. 3439 t. XLIII, 1919, Extr. p. 6, fig. 4-5; Mitt. Naturf. Ges. Bern. 1919 [1920], p. 179. — Caespitulis mollibus, griseo-flavis, totum tergum foliorum subtegentibus; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 250-450 μ altis, trunco $\frac{1}{3}$ - $\frac{2}{3}$ totius altitudinis efficienti, 7-13 μ crasso; ramis 5-9 ies dichotome ramosis, valde curvatis; furcis terminalibus 5-30 μ longis, rectangulis, saepe litterae graecae sigma similiter curvatis; conidiis fere hyalinis,

late ellipsoideis, 9-23, fere 12-18 μ longis, 8-20, fere 11-16 μ latis. Longitudine media, 15,94 μ , latitudine media 13,47 μ . Oosporis singulis in foliis marcidis, 27-31 μ diam., episporio laevi, 6-8 μ crasso. Oogoniis e membrana persistenti, saepe plicata, formati, 45-50 μ diametro.

Hab. in foliis vivis *Speculariae Speculi veneris* (L.) DC., (in Gallia meridionali), nec non *Speculariae hybridae* (L.) DC. (in Gallia septentrionali). — *Per. Phytheumatis* proxima sed pluribus notis distincta.

3. *Peronospora helvetica* Gäumann, Mitt. der Naturf. Ges. Bern, 1919 [1920], p. 178. 3440

Hab. in *Cerastio latifolio*, in Alpibus Helvetiae.

4. *Peronospora tornensis* Gäumann, l. c. p. 181. 3441

Hab. in *Cerastio alpino*, Scandinavia, Islanda.

5. *Peronospora septentrionalis* Gäumann, l. c. p. 181. 3442

Hab. in *Cerast. trigyno* Vill., Helvetia, Norvegia, Islanda.

6. *Peronospora media* Gäumann, Mitt. Naturf. Ges. Bern, 1919 [1920], p. 183. 3443

Hab. in *Stellaria media*, Europa, Asia occ.

7. *Peronospora litoralis* E. Gäumann, Mitt. Naturf. Ges. Bern, 1918 (1919), p. 62, fig. 1⁴. — Synon. ? *Peron. farinosa* Fr. p. p. — *Caespitulis* densissimis hypophyllis effusis; conidiophoris 3-16, 250-700 μ altis, dichotomice ramosis, infra 9-16 μ cr., $\frac{1}{2}$ - $\frac{3}{4}$ alt. totius arboris, furcis terminalibus rectangulis rectis v. saepius leviter sigmoideo-incurvatis, 10-60 μ long.; conidiis flavidulis late ellipsoideis, plerumque 28-32 \approx 19-23 (usque 20-37 \approx 10-26); oosporis copiosis in foliis marcescentibus, brunneis, levibus, raro rugosis, 29-42 μ diam., oogoniis 35-60 μ .

Hab. in foliis *Atriplicis litoralis* et verisimiliter etiam *A. hastatae*, Suecia Europa-bor.

8. *Peronospora variabilis* E. Gäumann, Mitt. Naturf. Ges. Bern., 1918 (1919), p. 62 fig. 1¹, 1919 (1920) p. 184. — Syn. *P. Chenopodii* Caspary 1854, *P. effusa* var. *major* Casp. 1855 p. p. et var. *manshuriae* Naoumoff 1914, *P. epiphylla* (Pers.) Lagerh. 1891 p. p. — *Caespitulis* densis hypophyllis plus v. minus effusis; conidiophoris 1-9, 150-450 μ altis, 2-7 dichotomice ramosis, trunco $\frac{1}{3}$ - $\frac{2}{3}$ alt. totius arboris, 8-12 μ cr.; furcis terminalibus sigmoideo-incurvatis, 20-60 μ long.; conidiis variabilibus, ellipsoideis fere papillatis, flavidulis, plerumque 25-30 \approx 16-20 (usque 17-40 \approx 12-28). — Oosporis non visis. 3445

Hab. in foliis *Chenopodii albi*, Wabern prope Bern Helvetia Europa, Nord-et Sud America, Asia.

9. *Peronospora effusa* Grév. — Sacc., Syll. VII p. 256 — var. *manshurica* Naumoff, Bull. Soc. Mycol. Fr. 1914 p. 72, t. I f. I. — Differt a typo atque a var. *minor* Caspary conidiis, fere globosis vel late ellipsoideis, 20-22 μ diam. vel 18-21 \times 21-24, et conidiophoris minus curvulis, paulo ramosis, ramis extimis brevioribus, saepius 6 μ raro 9-12 μ , rectis curvulisve.

Hab. in foliis juvenilibus *Chenopodii albae*, in prov. Austro-Ussuriensi (Rossiae-Orient.).

10. *Peronospora Boni Henrici* E. Gäumann, Mitt. Naturf. Ges. Bern, 3447 1918 (1919), p. 63 fig. 1². — Syn. *Peron. nivea* Unger 1847 p. p. — Caespitulis hypophyllis densissimis plus minus effusis, brunneo-violaceis; conidiophoris singulis v. plurimis (1-3), 200-400 μ altis, 4-9-dichotomicè ramosis, trunco 7-10 μ cr. $\frac{1}{3}$ - $\frac{2}{3}$, alt. totius arboris; furcis terminalibus rectangulis, leviter curvatis, 20-65 μ long.; conidiis globosis v. latissime ellipsoideis, leviter brunneo-violaceis, plerumque 24-28 \times 22-25 (usque 17-34 \times 16-31). Oosporis non visis.

Hab. in foliis *Chenopodii Boni Henrici*, Robberge prope Cortaillod, Helvetia.

11. *Peronospora Chenopodii ficifolii* Sawada, Agr. Exp. Sta. Formosa, 3448 Circ. Publ. n. 101, 1916, p. 9, cum icon.; The Formosan Agr. Review n. 155, 1916, p. 29, cum icon.; Mycologia 1919, p. 83. — Maculis hypophyllis pallide griseo-purpureis, rotundatis v. irregularibus, 1-27 mm. diam., quandoque late indeterminateque effusis; hyphis intercellularibus, hyalinis, continuis, 7-12 μ cr., haustoriis simplicibus v. apice ramosis, saepe plus minus spirales, 10-20 \times 3-4; conidiophoris caespitosi, 3-6 raro 7-dichotomicè ramosi, ramis omnibus apice incurvatis, 240-500 μ long. 8-14,4 μ cr.; conidiis oblongis v. subellipsoideis, basi papillatis, fuliginèis v. cinereis, 26-36 \times 17-25; statu oogonico ignoto.

Hab. in foliis *Chenopodii ficifolii*, Taiwan, Formosa, Japonia.

12. *Peronospora Chenopodii glauci* E. Gäumann, Mitt. Naturf. Ges. Bern, 3449 1918 (1919), p. 63. — Caespitulis griseo-violaceis, densis, hypophyllis late effusis; conidiophoris plerumque 3-5 (usque 1-8) 200-450 μ altis, 3-7 dichotomicè ramosis, trunco 7-11 μ cr., $\frac{1}{3}$ - $\frac{2}{3}$, alt. totius arboris; furcis terminalibus rectangulis, rectis v. leniter curvatis, 10-35 μ long.; conidiis ellipsoideis, leviter brunneis, variabilibus, raro papillatis, plerumque 26-34 \times 16-19 (usque 19-40

≈ 10-23); oosporis maturis non visis, immaturis 32-40 μ diam.

Hab. in foliis *Chenopodii glauci*, prope Berolinum, Germania (P. SYDOW, Myc. March. 3595).

13. *Peronospora muralis* Gäumann, Mitt. d. Naturf. Ges. Bern, 1919 3450 [1920], p. 184.

Hab. in *Chenopodio murale*, Europa, Amer. austr.

14. *Peronospora Chenopodii polyspermi* E. Gäumann, Mitt. Naturf. Ges. 3451

Bern, 1918 (1919), p. 64. — Caespitulis griseo-brunneis, densis, tergum foliorum nonnulla parte tegentibus; conidiophoris 2-9, 350-650 μ alt., 3-7-dichotome ramosis, trunco 7-15 μ cr. fere $\frac{2}{3}$ $\frac{3}{4}$ alt. totius arboris, basi saepe leniter tumida; furcis terminalibus rectangulis, curvulis, 8-25 μ long.; conidiis late ellipsoideis, paullo brunneo-violaceis, raro papillatis, plerumque 19-23 ≈ 13-17 (usque 11-27 ≈ 10-24). Oosporis non visis.

Hab. in foliis *Chenopodii polyspermi*, prope Biel, Helvetia.

15. *Peronospora Chenopodii rubri* E. Gäumann, Mitt. Naturf. Ges. Bern, 3452

1918 (1919), p. 64. — Caespitulis griseo-violaceis, densis hypophyllis, plus minus effusis; conidiophoris 2-6, 300-700 μ alt., fere 3-5-dichotomicè ramosis, trunco 8-13 μ cr., $\frac{1}{2}$ - $\frac{2}{3}$ alt. totius arboris; furcis terminalibus rectangulis, rectis v. curvulis, 15-50 μ long.; conidiis ellipsoideis paullo brunneo-v. griseo-violaceis, plerumque 26-30 ≈ 19-22 (usque 17-37 ≈ 12-31). Oosporis non visis.

Hab. in foliis *Chenopodii rubri*, prope Berolinum Germaniae (SYDOW, Myc. March. 1534).

16. *Peronospora Kochiae* E. Gäumann, Mitt. Naturf. Ges. Bern, 1918 3453

(1919), p. 64. — Caespitulis leviter flavis, mollibus, aegrè visibilibus; conidiophoris solitariis, 300-500 μ alt., 5-9 dichotomicè ramosis, trunco 6-11 μ cr., $\frac{1}{3}$ - $\frac{3}{4}$ alt. totius arboris; furcis terminalibus rectangulis, leviter curvatis 10-45 μ long.; conidiis late ellipsoideis paullo brunneo-violaceis, raro papillatis, plerumque 25-29 ≈ 19-23 (usque 20-36 ≈ 16-28). Oosporis non inventis.

Hab. in foliis *Kochiae sedoidis* Schr., Nowotscherkask, Rossia merid.-orient. (O. TREBOUX, in Sydow Phycom. et Protom. 333)

17. *Peronospora vistulensis* Wroblewski, Bull. Acad. Sc. Cracoviae, ser. 3454

B, 1915, n. 8-10 p. 243. — Caespitulis densis, depressis, late effusis, totam plantam obtegentibus griseo-violaceis; conidiophoris plerumque caespitose erumpentibus 200-300 μ alt. 8 μ cr., apice 4-8 ramosis, ramis elongatis rectis, ultimis angulum rectum efforman-

tibus, acutis, 12-21 μ long., rigidis v. parum incurvatis; conidiis polymorphis, semper magnis ovoideis elongato-ellipsoideis raro ellipsoideis, obtusis v. parum acutis, griseo-flavescentibus 29-45 \times 16-20. Oosporis non visis.

Hab. in *Salsola Kali*, Ciechocinek Poloniae (ZALEWSKI), *Salsola Kali* var. *Tragus*, Soska Kempa prope Warschau Praga (LAPCZYNSKI). — *Per. effusae* var. *majoris* Casp. proxima, differt apicibus rectis conidiis majoribus.

8. *Peronospora alpestris* Gäumann, Mitt. Naturf. Ges. Bern., 1919 3455 [1920], p. 181.

Hab. in *Helianthemum alpestre* (Jacq.) Dun., Helvetia, Gotlandia.

19. *Peronospora Radii* de Bary. — Syll. VII p. 254 — var. *epiphylla* 3456 Poirault, Bull. Assoc. Nat. de Nice, 1915, p. 9 (extr.). — A typo distinguitur conidiophoris aequae violaceis, per stomata exeuntibus, non trans ipsam epidermidem (ut in typo); oosporis non visis.

Hab. in foliis *Chrysanthemi Miconis*, Cap. d'Antibes, Alp. Marit. Galliae. — In eodem *Chrysanthemo* occurrit quoque typus in capitulis.

20. *Peronospora Alliariae Wasabi* E. Gäumann, Beih. Bot. Centralbl., 3457 XXXV, Abt. 1., 1918, p. 129. — Caespitulis densissimis; conidiophoris singulis (?) e stomatibus erumpentibus, 550-650 μ altis, furcis literae « sigma » similiter arcuatis; conidiis late ovoideis 14-27, fere 21-24 μ longis, 13-22, fere 18-21 μ latis, longitudine media 20,42 μ , latitudine media 18,69 μ ; oogoniis et oosporis ignotis.

Hab. in foliis *Alliariae Wasabi* (Maxim) Prantl. — *Per. parasiticae* affinis.

21. *Peronospora Alyssi calycini* E. Gäumann, Beih. Bot. Centralbl., 3458 XXXV, 1918, Abt. 1., p. 129, fig. 4. — Caespitulis raris, difficile visibilibus; conidiophoris singulis e stomatibus erumpentibus, 250 μ altis, furcis inaequalibus, fere 20 μ longis forcipi aut literae « sigma » similibus; conidiis ellipsoideis, 16-32, fere 22-27 μ longis, 13-24, fere 16-21 μ latis, longitudine media 24,61 μ , latitudine media 16,69 μ ; oogoniis et oosporis ignotis.

Hab. in ramis et foliis *Alyssi calycini* L. — An huc *Alyssum campestre* L. addendum sit?

22. *Peronospora Alyssi incani* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3459 Abt. 1., 1918, p. 130. — Caespitulis densis, tergum foliorum omnino protegentibus; conidiophoris pluribus (3-9) coalitis, gracilibus, 300-1000, fere 500-600 μ altis, furcis brevibus, literae « sigma »

similibus, imperfecte curvatis; conidiis ellipsoideis aut globosis, 14-26, fere 17-22 μ longis, 10-23, fere 16-21 μ latis, longitudine media 19,94 μ , latitudine media 18,22 μ ; oogoniis et oosporis ignotis.

Hab. in foliis *Alyssi incani* L. — *Per. parasiticae* affinis.

23. *Peronospora Arabidis alpinæ* E. Gäumann, Beih. Bot. Centralbl. 3460 XXXV, Abt. 1, 1918, p. 130, fig. 7. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus erumpentibus, 400 μ altis, furcis inaequaliter longis (ramus maior 30-80 μ , ramus minor 20-40 μ), aliquantum curvatis, parte extrema inflexis, conidiis late ellipsoideis, 12-31, fere 21-26 μ longis, 12-28, fere 20-24 μ latis, longitudine media 23,11 μ latitudine media 20,92 μ ; oogoniis et oosporis ignotis.

Hab. in foliis *Arabidis alpinæ* L. et *A. albidæ* Stev., Helvetia or. — *Per. parasiticae* affinis.

24. *Peronospora Arabidis glabrae* E. Gäumann, Beih. Bot. Centralbl. 3461 XXXV, Abt. 1, 1918, p. 130. — Caespitulis rarissimis, caules et inflorescentias protegentibus, conidiophoris fere singulis e stomatibus exeuntibus, 300-400 μ altis, furcis 30-80 μ longis, literae sigma similiter curvatis; conidiis late ellipsoideis, 12-31, fere 21-27 μ longis, 12-26 fere 21-24 μ latis, longitudine media 23,77 μ , latitudine media 21,91 μ ; oogoniis et oosporis ignotis.

Hab. *Arabidem glabram* Bernh. — *Peron. parasiticae* affinis.

25. *Peronospora Arabidis hirsutæ* E. Gäumann, Beih. Bot. Centralbl. 3462 XXXV, Abt. 1, 1918, p. 130. — Caespitulis densis, in caulibus et foliis expansis; conidiophoris plurimis (1-6) coalitis, 400 μ altis, furcis 30-80 μ longis, literae « sigma » similiter curvatis; conidiis ellipsoideis, 11-23, fere 15-18 μ longis, 8-20, fere 11-16 μ latis, longitudine media 16,12 μ , latitudine media 13,92 μ ; oogoniis et oosporis ignotis.

Hab. *Arabidem hirsutam* (L.) Scop. et *A. arenosam* Scop. — *Per. parasiticae* affinis.

26. *Peronospora Arabidis oxyphyllæ* E. Gäumann, Beih. Bot. Centralbl. 3463 XXXV, Abt. 1, 1918, p. 130. — Caespitulis densis, in tergo foliorum expansis; conidiophoris, 5-8 ies ramosis, singulis vel plurimis (1-8) e stomatibus exeuntibus, 120-300 μ altis, ramis undulatis, furcis literae sigma similiter curvatis; conidiis ellipsoideis, 16-29, fere 21-25 μ longis, 12-23, fere 16-19 μ latis, longitudine media 23,05 μ latitudine media 18,03 μ ; oogoniis et oosporis ignotis.

Hab. Arabidem oxyphyllam Greene. — *Per. parasiticae* affinis.

27. *Peronospora Arabidis Turritas* E. Gäumann, Beih. Bot. Centralbl., 3464 XXXV, Abt. 1, 1918, p. 130. — Caespitulis raris, in tergo foliorum expansis: conidiophoris singulis e stomatibus exeuntibus, 200-250 μ altis, furcis 30-80 μ longis, literae sigma similiter curvatis; conidiis late ellipsoideis, 11-24, fere 16-20 μ longis, 9-23, fere 15-19 μ latis, longitudine media 19,17 μ , latitudine media 17,32 μ ; oogoniis et oosporis ignotis.

Hab. Arabidem Turritam, Helvetia or. — *Per. parasiticae* affinis.

28. *Peronospora Arabidopsidis* E. Gäumann, Beih. Bot. Centralbl., 3465 XXXV, Abt. 1, 1918, p. 139. — Syn. *Per. parasitica* f. *Sisymbrii Thaliani* Schneid. 1865 in Rabenh. Fungi europ. 1364 — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 400 μ altis, furcis 10-60 μ longis, literae « sigma » similiter curvatis; conidiis parvulis, fere globosis, 9-24, fere 14-19 μ longis, 9-21, fere 13-19 μ latis, longitudine media 16,30 μ , latitudine media 14,50 μ ; oogoniis et oosporis ignotis.

Hab. Arabidopsidem Thalianam (L.) Heynhold [Stenophragma Thalianum (L.) Oel].

29. *Peronospora Barbareae* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3466 Abt. 1, 1918, p. 131. — Caespitulis densissimis, in tergo foliorum expansis; conidiophoris plurimis (2-6) coalitis, 250-300 μ altis, furcis literae sigma » similiter curvatis vel parte ultima inflexis; conidiis globosis, 11-25, fere 14-18 μ longis, 9-18, fere 13-16 μ latis, longitudine media 16,58, latitudine media 14,26 μ ; oogoniis et oosporis ignotis

Hab. Barbaream vulgare R. Br. — *Per. parasiticae* affinis.

30. *Peronospora Berteroae* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3467 Abt. 1, 1918, p. 131. — Caespitulis rarissimis; conidiophoris singulis e stomatibus exeuntibus, 150-450 μ altis, paullum ramosis, furcis brevibus, irregularibus; conidiis fere globosis, 12-21, fere 16-18 μ longis, 12-20, fere 15-17 μ latis, longitudine media 17,36 μ , latitudine media 16,04 μ ; oogoniis et oosporis ignotis.

Hab. Berteroam incanum (L.) DC. — *Per. parasiticae* affinis.

31. *Peronospora Galmanniana* Jaap in E. Gäumann, Beih. Bot. Centralbl. 3468 XXXV, Abt. 1, 1918, p. 132. — Caespitulis densis, in tergo foliorum expansis; conidiophoris plurimis (2-8) coalitis, 300-500 μ altis, furcis 20-65 μ longis, literae « sigma » similiter curvatis, sed saepe

parte ultima inflexis; conidiis late ellipsoideis, 14-29, fere 19-23 μ longis, 11-25, fere 14-21 μ latis, longitudine media 21,31 μ , latitudine media 17,95 μ ; oosporis et oogoniis ignotis.

Hab. Berteroam mutabilem DC. — *Per. parasiticae* affinis.

32. *Peronospora Biscutellae* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3469

Abt. 1, 1918, p. 131. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris gracillimis, e singulis stomatibus exeuntibus, 700 μ altis, furcis 30-80 μ longis, literae « sigma » similiter curvatis; conidiis fere globosis, 11-23, fere 14-19 μ longis, 9-20, fere 13-17 μ latis, longitudine media 17,02 μ , latitudine media 15,69 μ ; oogoniis et oosporis ignotis.

Hab. Biscutellam laevigatam L., Helvetia, Bavaria. —

Per. parasiticae affinis.

33. *Peronospora Brassicae* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3470

Abt. 1, 1918, p. 131; Mitt. Naturf. Ges. Bern, 1919, Heft. V. — Caespitulis raris, in caulibus, foliis et cotyledonibus expansis; conidiophoris fere singulis vel binis e stomatibus exeuntibus, 400 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis leviter ellipsoideis, 12-28, fere 16-22 μ longis, 11-23, fere 16-19 μ latis, longitudine media 19,65 μ , latitudine media 17,42 μ ; oogoniis e tunica persistenti formatis singulis in foliis, 35-50, fere 40 μ diam.; oosporis globosis, 25-30, fere 28 μ diam.

Hab. Brassicam Napum L., Brass. oleraceam L., Brass. Rapam L. et nonnullas varietates harum specierum, nec non in Raphano sativo, Sinapide alba et arvensi, Europa, Asia, America. — *Per. parasiticae* affinis.

34. *Peronospora Buniadis* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3471

Abt. 1, 1918, p. 132. — Caespitulis raris, in tergo foliorum expansis; conidiophoris plurimis (1-9) coalitis, 300-500 μ altis, furcis 15-80 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 16-32, fere 21-26 μ longis, 12-26 fere 19-23 μ latis, longitudine media 22,74 μ , latitudine media 20,30 μ ; oogoniis et oosporis ignotis.

Hab. Buniadem orientalem L. — *Per. parasiticae* affinis.

35. *Peronospora Calepinæ* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3472

Abt. 1, 1918, p. 132. — Caespitulis densis, in caulibus, inflorescentiis et in tergo foliorum expansis; conidiophoris singulis vel plurimis (1-3) e stomatibus exeuntibus, 300-700, fere 400-500 μ altis, furcis 30-80 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-33, fere 19-24 μ longis, 9-24, fere 16-20 μ latis,

longitudine media 22,46 μ , latitudine media 18,74 μ ; oogoniis e tunica persistente formatis, 35-60, fere 45-50 μ diam.; oosporis globosis, 28-37, fere 33-35 μ diam.

Hab. Calepinam irregularem (Asso) Thellung. — *Per. parasiticae* affinis.

36. **Peronospora Camelinae** E. Gäumann, Beih. Bot. Centralbl. XXXV, 3473
Abt. 1., 1918, p. 132 fig. 13. — *Peronos. parasitica* f. *Camelinae* J. Kühn 1864, in Rabenh. Fungi europ. 790 b. — Caespitulis raris, in caulibus, foliis et siliquis expansis; conidiophoris plurimis (2-3) coalitis, 250-309 μ altis, furcis brevibus, irregularibus; conidiis late ellipsoideis, 17-28, fere 21-24 μ longis, 12-24, fere 18-21 μ latis, longitudine media 22,47 μ , latitudine media 19,25 μ ; oogoniis frequentissimis in caulibus, e tunica persistenti formatis; ellipsoideis, 43-58, fere 51-54 μ longis, oosporis globosis, 30-34 μ diam.

Hab. Camelinae sativam (L.) Crantz et probabiliter C. microcarpam Andrzej., Europa, Africa bor.

37. **Peronospora parasitica** (Pers.) De By. — Syll. VII, P. 1., p. 249, 3474
p. p. — E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 133; Mitt. Naturf. Ges. Bern, 1919, Heft V. — Verisimiliter in Capsella tantum vigens (C. Bursa pastoris, C. pauciflora Koch), Europa, Asia, America bor.
38. **Peronospora Dentariae** Rabh. — Syll. VII, I, p. 249, p. p.; *Per. con-* 3475
ferta Ung. 1847, p. 314 ex p.

Hab. Cardaminem amaram, hirsutam, pinnatam, pratensem, Europa et Amer. bor. — *Per. parasiticae* affinis.

39. **Peronospora Cardamines laciniatae** E. Gäumann, Beih. Bot. Cen- 3476
tralbl. XXXV, Abt. 1, 1918, p. 133. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 150-300 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis ellipsoideis 12-28, fere 18-22 μ longis, 11-21, fere 12-18 μ latis, longitudine media 19,70 μ , latitudine media 16,23 μ ; oogoniis et oosporis ignotis.

Hab. Cardaminem laciniatam Wood et probabiliter Card. bulbiferam (L.) Crantz. — *Per. parasiticae* affinis.

40. **Peronospora Cheiranthi** E. Gäumann, Beih. Bot. Centralbl. XXXV, 3477
Abt. 1, 1918, p. 134. — *Per. parasitica* f. *Cheiranthi* Fuck., Fungi rhenani 1501, f. *Cheiranthi-cheiri* Roumeg. 1884, Fungi gall. exs. 2926. — Caespitulis densissimis, in caulibus, inflorescentiis et foliis expansis; conidiophoris plurimis (1-8) coalitis, 400-500 μ altis, va-

riabilibus, furcis acutangulo-divergentibus vel arcuatis vel undulatis, 15-85 μ longis, 12-24, fere 16-21 μ latis, longitudine media 23-19 μ , latitudine media 18,23 μ ; oogoniis et oosporis ignotis.

Hab. Cheiranthum Cheiri L.

41. *Peronospora Chorisporae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3478

Abt. 1, 1918, p. 134. — Caespitulis raris, in tergo foliorum expansis; conidiophoris 300-400 μ altis, furcis 40-90 μ longis, literae « sigma » similiter curvatis; conidiis ellipsoideis, 19-29, fere 24-27 μ longis, 17-26, fere 21-24 μ latis, longitudine media 25,14 μ , latitudine media 22,72 μ ; oogoniis et oosporis ignotis.

Hab. Chorisporam tenellam DC. — *Per. parasiticae* affinis.

42. *Peronospora Conringiae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3479

Abt. 1., 1918, p. 134. — Caespitulis densis, in tergo foliorum expansis; conidiophoris plurimis (2-3) coalitis, gracilibus, 500-600 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis parvulis, late ellipsoideis, 12-21, fere 14-16 μ longis, 11-15, fere 13-15 μ latis, longitudine media 15,39 μ , latitudine media 13,71 μ ; oogonis et oosporis ignotis.

Hab. Conringiam orientalem Dum. — *Per. parasiticae* affinis.

43. *Peronospora Coronopi* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3480

Abt. 1., 1918, p. 138; Mitt. Naturf. Ges. Bern. 1919 [1920] p. 179. — Syn. *Peronospora Lepidii* (Mc Alp.) Wilson 1914 p. p. — Caespitulis densissimis, in tergo foliorum expansis; conidiophoris plurimis (4-6) coalitis, 250-400 μ altis, furcis literae « sigma » similiter curvatis, sed parte ultima rami longioris inflexis; conidiis longe ellipsoideis, mutabilibus, 14-31, fere 21-27 μ longis, 11-24, fere 16-19 μ latis, longitudine media 23,16 μ , latitudine media 18,01 μ ; oogoniis et oosporis ignotis.

Hab. Coronopum didymum (L.) Smith (*Senebiera pinatifida* DC.), Rep. Argentina, Amer. austr.

44. *Peronospora Dentariae macrophyllae* E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 133. — 3481

Caespitulis raris, in tergo foliorum expansis; conidiophoris plurimis (6-7) coalitis, 300-400 μ altis, furcis 30-80 μ longis literae « sigma » similiter curvatis, vel parte ultima inflexis; conidiis ellipsoideis, 16-29, fere 21-26 μ longis, 12-24, fere 18-21 μ latis, longitudine media 23,14 μ , latitudine media 18,81 μ ; oogoniis et oosporis ignotis.

Hab. Dentariam macrophyllam Bge. — *Per. parasiticae* affinis.

45. *Peronospora Diplotaxidis* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3482

Abt. 1., 1918, p. 134. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 300-400 μ altis, furcis irregularibus, fere brevibus; conidiis ellipsoideis 12-26, fere 18-21 μ longis, 11-27, fere 15-19 μ latis, longitudine media 18,88 μ , latitudine media 16,52 μ ; oogoniis et oosporis ignotis.

Hab. *Diplotaxidem tenuifoliam* (L.) DC. — *Per. parasiticae* affinis.

46. *Peronospora Drabae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3483

Abt. 1., 1918, p. 134. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 300-400 μ altis, furcis fere brevibus, literae « sigma » similiter curvatis vel irregularibus; conidiis parvis, ellipsoideis, 11-24, fere 16-21 μ longis, 9-21, fere 14-18 μ latis, longitudine media 17,64 μ , latitudine media 15,81 μ ; oogoniis et oosporis ignotis.

Hab. *Drabam carolinianam* Walt. et *D. nemorosam* L. — *Per. parasiticae* affinis.

47. *Peronospora Erophilae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3484

Abt. 1., 1918, p. 135. — *Per. parasitica* for. *Drabae* Frank 1877, in Rabenh., Fungi europ. 2346. — Caespitulis densissimis, in toto tergo foliorum expansis; conidiophoris fere plurimis (1-6) e stomatibus exeuntibus, gracilibus, 400 μ altis, literae « sigma » similiter curvatis vel irregularibus; conidiis parvulis, late ellipsoideis, 11-21, fere 13-16 μ longis, 8-13, fere 11-14 μ latis, longitudine media 15,17 μ , latitudine media 13,11 μ ; oogoniis et oosporis ignotis.

Hab. *Erophilam vernam* (L.) E. Mey.

48. *Peronospora Erucastris* E. Gäumann, Beih. Bot. Centralbl., XXXV, 3485

Abt. 1., 1918, p. 135. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris plurimis (2-3) e stomatibus exeuntibus, 300 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis ellipsoideis, mutabilibus, 14-32, fere 17-24 μ longis, 12-23, fere 16-29 μ latis, longitudine media 21,70 μ , latitudine media 17,23 μ ; oogoniis et oosporis ignotis.

Hab. *Erucastrum Pollichii* Sch. — *Per. parasiticae* affinis.

49. *Peronospora Erysimi* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3486

Abt. 1., 1918, p. 135. — *Per. parasitica* f. *Erysimi cheiranthoidis* Thüm. 1872, Fungi austr. 938, f. *Erys. repandi* Thüm. 1873, l. c. 1135. — Caespitulis densissimis, in caulibus et foliis expansis; conidiophoris fere plurimis (1-8) e stomatibus exeuntibus, 300-600 μ

altis, furcis literae « sigma » similiter curvatis vel irregularibus; conidiis longe ellipsoideis, 12-26, fere 19-22 μ longis, 11-21, fere 14-18 μ latis, longitudine media 20,18 μ , latitudine media 16,10 μ ; oogoniis e tunica persistenti formatis, 35-44, fere 37-38 μ diam., oosporis globosis 29-32 μ diam.

Hab. *Erysimum crepidifolium* Reich., *cheirantoidem* L., *hieracifolium* L. et *repandum* L.

50. *Peronospora Hesperidis* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3487

Abt. 1., 1918, p. 135. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris fere plurimis (1-6) e stomatibus exeuntibus, 200-250 μ altis, furcis 25-65 μ longis, literae « sigma » similiter curvatis; conidiis magnis, 19-34, fere 24-28 μ longis, 17-28, fere 21-24 μ latis, longitudine media 26,41 μ , latitudine media 22,28 μ ; oogoniis et oosporis ignotis.

Hab. *Hesperidem matronalem* L. — *Per. parasiticae* affinis.

51. *Peronospora Isatidis* E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 3488

1., 1918, p. 136, fig. 22. — Caespitulis densis, in tergo foliorum expansis; conidiophoris singulis vel plurimis (1-4) e stomatibus exeuntibus, 200-250 μ altis, furcis literae « sigma » similiter curvatis vel irregularibus; conidiis ellipsoideis, 14-32, fere 21-26 μ longis, 11-24, fere 17-21 μ latis, longitudine media 22,45 μ , latitudine media 19,33 μ ; oogoniis et oosporis ignotis.

Hab. *Isatidem tinctoriam* L., Helvetia or. — *Per. parasiticae* affinis.

52. *Peronospora Lepidii sativi* E. Gäumann, Beih. Botan. Centralbl., 3489

XXXV, Abt. 1., 1918, p. 136. — Caespitulis densis, in foliis, caulibus et ramis expansis; conidiophoris singulis vel plurimis (1-6 fere 3-4) e stomatibus exeuntibus, 300-500 μ altis, furcis 15-70 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 16-28, fere 19-26 μ long. 16-24 fere 18-21 μ lat., long. media 22,34 μ , latitudine media 19,18 μ ; oogoniis e tunica persistenti formatis, 40-53, fere 46-50 μ diam., oosporis globosis, 29-41, fere 32-45 μ diam.

Hab. *Lepidium campestre* (L.), *Lep. Drabam* L., *Lep. latifolium* L. (?), *Lep. ruderale* L. et *Lep. sativum* L., Europa, Amer. bor. — *Per. parasiticae* affinis.

53. *Peronospora Lepidii* (Mc Alp.) Wilson, Mycol. 1914, p. 198 t. 135 3490

f. 1-10. — *Peronospora parasitica* var. *Lepidii* Mac Alp., Proc. Roy. Soc. Victoria, 1895, p. 221. — A *P. parasitica* et *P. Niessleana* dif-

fert ramis primariis conidiophorum ascendentibus et non dense capitatis.

Hab. in foliis *Lepidii virginici* (America bor.), *L. ruderali* (Australia), et probabiliter etiam in Europa.

54. *Peronospora Lepidii virginici* E. Gäumann, Beih. Bot. Centralbl. 3491 XXXV, Abt. 1., 1918, p. 136, fig. 23. — *Per. Lepidii* (Mc Alp.) Wilson 1914, p. 198 p. p. — Caespitulis densis, in tergo foliorum expansis; conidiophoris plurimis (7-9) coalitis, 200 μ altis, furcis literae « sigma » similiter curvatis, sed parte ultima rami longioris inflexis; conidiis longe ellipsoideis, 19-37, fere 24-30 μ longis, 14-24, fere 16-21 μ latis, longitudine media 27,52 μ , latitudine media 18,35 μ ; oogoniis e tunica persistenti formatis, 40-52, fere 48 μ diam.; oosporis globosis, 25-42, fere 32 μ diam.

Hab. *Lepidium virginicum* L. — *Peronospora parasiticae* affinis.

55. *Peronospora Lunariae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3492 Abt. 1., 1918, p. 136, fig. 24. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis vel plurimis stomatibus exeuntibus, 200-600 μ altis, furcis undulatis vel literae « sigma » similiter curvatis, sed parte ultima utrorum ramorum inflexis, 50-90 μ longis; conidiis magnis, 19-31, fere 24-27 μ longis, 16-21, fere 21-24 μ latis, longitudine media 25,85 μ , latitudine media 21,74 μ ; oogoniis et tunica persistenti formatis, 40-75, fere 26-64 diam., oosporis globosis, 29-42, fere 32-35 μ diam.

Hab. *Lunaria annua* L. et *rediviva* L. — *Per. parasiticae* affinis.

56. *Peronospora Matthiolae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3493 Abt. 1., 1918, p. 137. — *Per. parasitica f. Matthiolae annuae* Roum. 1894, Fungi gall. 3137. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris plurimis (3-5) coalitis, 300 μ altis, furcis fere 40-60 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-24, fere 16-22 μ longis, 9-21, fere 14-19 μ latis, longitudine media 18,93 μ , latitudine media 16,23 μ ; oogoniis et oosporis ignotis.

Hab. *Matthiola incana* R. Br. — Europa media.

57. *Peronospora Nasturtii aquatici* E. Gäumann, Beih. Bot. Centralbl. 3494 XXXV, Abt. 1., 1918, p. 138. — Caespitulis raris, in tergo foliorum expansis; conidiophoris plurimis e stomatibus exeuntibus, furcis irregularibus vel literae « sigma » similiter curvatis; conidiis late ellipsoideis 10-17, fere 11-14 μ longis, 8-13, fere 9-12 μ latis,

longitudine media 20,32 μ , latitudine media 17,07 μ ; oogoniis et oosporis ignotis.

Hab. Nasturtium aquaticum (L.) Beck. — *Peron. parasiticae* affinis.

58. *Peronospora Nasturtii montani* E. Gäumann, Beih. Bot. Centralbl. 3495

XXXV, Abt. 1., 1918, p. 138. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis stomatibus exeuntibus 350-400 μ altis, truncis crassis (15 μ diam.), ramis undulatis, furcis literae « sigma » similiter curvatis; conidiis maximis, 19-36, fere 24-30 μ longis, 16-31, fere 21-27 μ latis, longitudine media 27,81 μ , latitudine media 24,16 μ ; oogoniis et oosporis ignotis.

Hab. Nasturtium montanum Wal. — *Peron. parasiticae* affinis.

59. *Peronospora Nesleae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3496

Abt. 1., 1918, p. 137. — *Per. parasitica* Tul. f. *Nesliae* Thüm. 1872, Fungi austr. 650, Rabenh. Fungi europ. 794. — Caespitulis densissimis, in toto tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, gracilibus, 180-600 μ altis, furcis 30-60 μ longis, irregulariter vel literae « sigma » similiter curvatis, sed parte ultima longioris rami inflexis; conidiis late ellipsoideis, 12-24, fere 16-19 μ longis, 11-19, fere 14-17 μ latis, longitudine media 16,98 μ , latitudine media 15,65 μ ; oogoniis e tunica persistenti formatis, frequentissimis in foliis veteribus, 32-49, fere 35-38 μ diam., oosporis globosis, 24-32, fere 27-29 μ diam.

Hab. Nesleam paniculatam (L.) Desv. — Europa med.

60. *Peronospora Roripae islandicae* E. Gäumann, Beih. Bot. Centralbl. 3497

XXXV, Abt. 1., 1918, p. 137 fig. 27: — *Per. Lepidii* (Mc Alp.) Wils. 1914, p. p. — Caespitulis densissimis, in tergo foliorum expansis; conidiophoris plurimis (3-6) e stomatibus exeuntibus 250-400 μ altis, furcis rectangulis, paene rectis, 10-40 μ longis; conidiis parvis, 11-23, fere 14-19 μ longis, 9-19, fere 13-16 μ latis, longitudine media 16,62 μ , latitudine media 13-79 μ ; oogoniis et oosporis ignotis.

Hab. Roripam islandicam (Meder) Schinz et Thellung et *R. silvestrem* (L.) Besser. — *Per. parasiticae* affinis.

61. *Peronospora Sisymbrii officinalis* E. Gäumann, Beih. Bot. Centralbl. 3498

XXXV, Abt. 1., 1918, p. 139, fig. 34. — Syn. *P. parasitica* f. *Sisymbrii* Schneid. 1864, Winter 1871, in herb. — Caespitulis densis, in siliquis et in tergo foliorum expansis; conidiophoris plurimis (4-6) e stomatibus exeuntibus, 250-400 μ longis, furcis literae « sigma »

similiter curvatis, sed parte ultima rami longioris fere inflexis; conidiis late ellipsoideis 12,28, fere 18-24 μ longis, 11-26, fere 16-21 μ latis, longitudine media 20,80 μ , latitudine media 17-76 μ ; oogoniis e tunica persistenti formatis, 40-53, fere 41-50 μ diam.; oosporis globosis, 27-34, fere 29-32 μ diam.

Hab. Sisymbrium Irio L., *Sis. officinale* (L.) Scop. et *Sis. pannonicum* Jacq., Europa et America bor.

62. *Peronospora Sophiae pinnatae* E. Gäumann, Beih. Bot. Centralbl. 3499

XXXV, Abt. 1., 1918, p. 139. — Caespitulis densissimis, in caulibus, inflorescentiis et in tergo foliorum expansis; conidiophoris plurimis (3-8) e stomatibus exeuntibus, gracilibus, 450-650 μ altis, furcis brevibus, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-26, fere 18-22 μ longis, 11-24, fere 16-21 μ latis, longitudine media 19,95 μ , latitudine media 18-19 μ ; oogoniis et oosporis ignotis.

Hab. Sisymbrium incisum Engelm. et *Sophiam pinnatam* Howell. — *Per. parasiticae* affinis.

63. *Peronospora Sisymbrii Sophiae* E. Gäumann, Beih. Bot. Centralbl. 3500

XXXV, Abt. 1., 1918, p. 139. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis vel plurimis (1-4) e stomatibus exeuntibus, 200-250 μ altis, furcis inaequalibus, fere 20 μ longis, forcipi vel literae « sigma » similiter curvatis; conidiis longe ellipsoideis, 19-34, fere 24-30 μ longis, 12-26, fere 18-22 μ latis, longitudine media 27,05 μ , latitudine media 19,81 μ ; oogoniis e tunica persistente formatis, 43-55, fere 49-52 μ diam., oosporis globosis, 33-35 μ diam.

Hab. Sisymbrium Sophiam L. et fortasse *S. canescentem* Nutt. — *Per. parasiticae* affinis.

64. *Peronospora Sisymbrii orientalis* E. Gäumann, Beih. Bot. Centralbl. 3501

XXXV, Abt. 1., 1918, p. 139, fig. 35. — Caespitulis densis, in tergo foliorum expansis; conidiophoris singulis vel binis e stomatibus exeuntibus, 300-350 μ altis, furcis 20-70 μ longis, literae « sigma » similiter curvatis; conidiis ellipsoideis, 16-27, fere 22-26 μ longis, 14-26, fere 19-22 μ latis, longitudine media 23,17 μ , latitudine media 20,49 μ ; oogoniis et oosporis ignotis.

Hab. Sisymbrium orientale L. — *Per. parasiticae* affinis.

65. *Peronospora Sisymbrii Loesellii* E. Gäumann, Beih. Bot. Centralbl. 3502

XXXV, Abt. 1., 1918, p. 138. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris singulis vel plurimis stomatibus exeuntibus, 200-250 μ altis, furcis 15-50 μ longis, literae « sigma »

similiter curvatis vel irregularibus, conidiis fere globosis, 12-24, fere 16-21 μ longis, 11-21, fere 14-19 μ latis, longitudine media 18,83 μ , latitudine media 16,51 μ ; oogoniis et oosporis ignotis.

Hab. Sisymbrium Loeselii L. — *Per. parasiticae* affinis.

66. *Peronospora Sisymbrii intermedii* E. Gäumann, Beih. Bot. Centralbl. 3503

XXXV, Akt. 1., 1918, p. 138, fig. 33. — Caespitulis raris in caulibus et inflorescentiis expansis; conidiophoris plurimis (3-5) coactis, 200-400 fere 300 μ altis, furcis parvissimis, 10-15 μ longis, fere literae « sigma » similiter curvatis, saepe una ex parte nascentibus; conidiis ellipsoideis, 16-29, fere 21-26 μ longis, 12-23, fere 16-21 μ latis, longitudine media 22,82 μ , latitudine media 18,38 μ , oogoniis et oosporis ignotis

Hab. Sophiam intermediam. — *Per. parasiticae* affinis.

67. *Peronospora Teesdaleae* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3504

Abt. 1., 1918, p. 140 — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, fere 300-400 μ altis, furcis literae « sigma » similiter curvatis, sed parte ultima rami longioris inflexis; conidiis late ellipsoideis, 11-17, fere 12-15 μ longis, 9-14, fere 11-13 μ latis, longitudine media 21,25 μ , latitudine media 28,62 μ . Oogoniis et oosporis ignotis.

Hab. Teesdaleam nudicaulem (L.) R. Br. — *Per. parasiticae* affinis.

68. *Peronospora Thlaspeos alpestris* F. Gäumann, Beih. Bot. Centralbl. 3505

XXXV, Abt. 1., 1918, p. 140, fig. 40. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, parvis, 120-250 μ altis, ramis undulatis, furcis literae « sigma » similiter curvatis, conidiis ellipsoideis, 13-27, fere 19-24 μ longis, 12-23, fere 16-19 μ latis, longitudine media 20,81 μ , latitudine media 18,13 μ ; oogoniis et oosporis ignotis.

Hab. in Thlaspi alpestre L. — *Per. parasiticae* affinis.

69. *Peronospora Thlaspeos arvensis* E. Gäumann, Beih. Bot. Centralbl. 3506

XXXV, 1918, Abt. 1., p. 140. — Syn. *Per. parasitica* f. *Thlaspeos arvensis* Thüm. 1873, Fungi austr. 936, Mycoth. univers. 1874 p.

48. — Caespitulis raris, in caulibus, siliquis et in tergo foliorum expansis; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 250-400, fere 300 μ altis, ramis undulatis, furcis literae « sigma » similiter curvatis vel variabilibus; conidiis late ellipsoideis, mutabilibus, 17-32, fere 24-29 μ longis, 14-26, fere 18-22 μ latis, longitudine media 25,45 μ , latitudine media 20,13 μ ; oogoniis e tunica persistenti formati, 54-59 μ diam., oosporis globosis, 35-37 μ diam.

Hab. in Thlaspi arvense L.

70. *Peronospora Thlaspeos perfoliati* E. Gäumann, Beih. Bot. Centralbl. 3507

XXXV, Abt. 1., 1918, p. 140. — Syn. *Per. parasitica* f. *Thlaspeos perfoliati* Thüm. 1872, Fungi austr. 407. — Caespitulis densis, in caulibus et in tergo foliorum expansis; conidiophoris plurimis (6-8) e stomatibus exeuntibus, 250-300 μ altis, furcis 15-80 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-27, fere 16-21 μ longis 11-19, fere 16-18 μ latis, longitudine media 18,84 μ , latitudine media 16,34 μ : oogoniis e tunica persistenti formati, frequentissimis in foliis veteribus, fere 43-48 μ diam.; oosporis globosis, 30-34 μ diam.

Hab. in Thlaspi perfoliato L.

71. *Peronospora Turritidis* E. Gäumann, Beih. Bot. Centralbl. XXXV, 3508

Abt. 1., 1918, p. 141, fig. 43. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 250-300 μ altis, furcis literae « sigma » similiter curvatis vel irregularibus; conidiis late ellipsoideis, 12-24, fere 16-21 μ longis, 11-21, fere 14-18 μ latis, longitudine media 18,94 μ , latitudine media 16,37 μ ; oogoniis et oosporis ignotis.

Hab. Turritidem glabram L. — *Per. parasiticae* affinis.

72. *Peronospora Cephalariae* F. Vincens, Bull. Soc. Mycol. Fr. 1913, 3509

p. 174, t. VI. — Plagulis densis pallide griseo-violaceis; conidiophoris 3-5 gregariis, 250-300 \times 7-8, basi subinfatis, supra 4-6 ramosis; ramulis inferioribus et mediis plus v. minus flexuosis, suberectis, extimis inaequalibus, patentibus, rectis v. curvatis; conidiis ovoideis 25-30 \times 15-20, infra leniter apiculatis, sordide violaceis; oosporis 30-35 μ diam. episporio obscuro verrucoso praeditis.

Hab. in foliis Cephalariae leucanthae, raro *C. alpinae* et *C. transylvanicae*, in Horto botanico Toulouse, Gallia. — *Per. Dipsaci* affinis.

73. *Peronospora Chamaesydis* Wilson, Mycologia 1914, p. 204, t. 135 3510

f. 11-13. — Maculis epiphyllis decoloratis, griseo-v. dilute-aureis; conidiophoris hypophyllis dense caespitosis 1-3 e stomatibus erumpentibus, 200-450 \times 6-10, 6-9-ies ramosis, ramis elongatis, gracilibus, flaccidis, incurvatis, flexuosis, ultimis subaequalibus, axialibus longioribus parum subulatis, angustis, rectis, 5-8 \times 2-4; conidiis globosis v. ovoideis, 20-28 \times 12-20, violaceis; oogoniis tenuiter tunicatis, flavidis; oosporis 30-40 μ cr. flavo-brunneis, episporio leviusculo v. plus minus ruguloso.

Hab. in foliis Euphorbiae (e Sect. Anisophylli) serpen-

tis, maculatae, stictosporae, humistratae, glyptosporae, in America boreali. — Cnfr. n. 76.

74. *Peronospora Esulae* E. Gäumann, Ann. Cons. et Jard. Bot. Genève, 351
v. XXI, 1919, p. 11, fig. 2. — Caespitulis mollibus, griseo-brunneis, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 300-550 μ altis, trunco $1/2$ - $3/4$ totius altitudinis efficienti, 8-11 μ crasso, ramis 3-7 ies dichotome ramosis, leviter curvatis; furcis terminalibus brevibus, rectangulis, paene rectis; conidiis leviter flavis, 12-31, fere 19-24 μ longis, 8-23, fere 12-18 μ latis. Longitudine media 22-21 μ , latitudine media 15,62 μ . Oosporis ignotis.

Hab. in foliis vivis *Euphorbiae Esulae* L., Europa media. 3512

75. *Peronospora valesiaca* E. Gäumann, Ann. Cons. et Jard. Bot. Genève, v. XXI, 1919, p. 9; Mitt. Naturf. Ges. Bern, 1919 [1920], p. 178, fig. 2. — Caespitulis mollibus, griseo-brunneis, totum tergum foliorum subtegentibus; conidiophoris singulis vel plurimis (1-4) e stomatibus exeuntibus, 300-400 μ altis, trunco $1/2$ - $3/4$ totius altitudinis efficienti, 5-9 μ crasso; ramis 5-8 ies dichotome ramosis, leviter flexuosis, furcis terminalibus rectangulis, ramis utribus vel longitudine aequali vel uno paullo longiore, fere litterae sigma similiter curvatis. Conidiis leniter brunneis 14-32, fere 21-24 μ longis, 12-28, fere 18-21 μ latis; longitudine media 22,30 μ , latitudine media 19,68 μ . Oosporis ignotis.

Hab. in foliis vivis *Euphorbiae Gerardianae*, Wallis Helvetia.

76. *Peronospora Euphorbiae glyptospermae* E. Gäumann, Ann. Cons. et 3513
Jard. bot. Genève, v. XXI, 1919, p. 10, fig. 1. — Syn. *Per. Chamaecycis* Wils., Mycologia VI, 1914, p. 204 p. p. — Caespitulis mollissimis, griseo-brunneis, difficile visibilibus, totum tergum foliorum subtegentibus; conidiophoris fere singulis (1-3) e stomatibus exeuntibus, 150-300 μ altis, trunco $1/2$ - $3/4$ totius altitudinis efficienti, gracili, 4-7 μ crasso; ramis 3-5 ies dichotome ramosis, leviter curvatis; furcis terminalibus brevissimis, 4-20 μ longis, rectangulis, rectis vel leniter curvatis; conidiis leviter flavo-brunneis, ellipsoideis, 17-34, fere 24-29 μ longis, 8-23, fere 14-19 μ latis. Longitudine media 26,27 μ , latitudine media 16,74 μ . Oosporis ignotis.

Hab. in foliis vivis *Euphorbiae glyptospermae* L. — gelm., Nebraska, Amer. bor. — Vide supra n. 73

77. *Peronospora stigmaticola* Raunkjær, Botanisk Tidsskrift, XVIII 3514
p. 108. (1892-93), Lind-Rost., Fungi Dan. p. 69. — Hyphis conidio-

phoris erectis, sparsis vel fasciculatis sordide et dilute violascentibus, usque ad 0,5 mm. altis, c. 8-15 μ crassis, apice inaequaliter 4-7 ies dichotomis; ramis sensim attenuatis, patentibus vel divaricatis, ultimis conoideo-subulatis, rectis vel leviter curvatis, 6-12 μ longis; conidiis ellipsoideis, 30-50 μ longis, 10-15 μ latis, obtusiusculis, sordide et dilute violascentibus; oogoniis sphaeroideo-ovoideis, 35-55 μ diam.; oosporis sphaeroideis 25-35 μ diam., episporio laete flavido-fusco praeditis. Canalis stigmaticus praesertim plantae nutritis oosporis repletus.

Hab. in floribus, praecipue stigmatibus et filamentis *Menthae arvensis* et *aquaticae*, in Dania (Iylland) et Scania.

78. *Peronospora Senneniana* Fragoso et Sacc. in Sacc., Notae mycol. 3515

XXII, 1917 (Acc. Pad.) p. 158. — Media inter *Peron. Trifoliorum* et *Peron. Viciae*; hyphis, ramis ramulisque *Peron. Viciae*; conidiis vero oblongo-ellipsoideis, utrinque leviter obtuseque acutatis, multo amplioribus, nempe 35-38 \times 16-19, sordide diluteque olivaceis, intus nubilosis; caespitulis effusis, hypophyllis, dilute olivaceo-griseis.

Hab. in foliis languidis *Lathyri* (*Orobi*) *nigri*, *Planes* in Pyrenaeis, alt. 1450 m., ubi legit egr. SENNEN., Martio 1916 et communicavit cl. G. FRAGOSO. — Forma, magnitudine coloreque conidiorum distincta species videtur.

79. *Peronospora Phacae* E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 3516
[1920], p. 178.

Hab. in *Phaca frigida*, in Alpibus Helvetiae.

80. *Peronospora Oxytropidis* E. Gäumann, l. c. 3517

Hab. in *Oxytropide campestri*, Albula Helvetia.

81. *Peronospora Trifolii alpestris* E. Gäumann, l. c. p. 182. 3518

Hab. in *Trifolio alpestre*, Helvetia, Germania bor., Dania.

82. *Peronospora Trifoliorum* De By. — var. *manshurica* Naoumoff, Bull. 3519
Soc. Mycol. Fr. 1914 p. 73, t. I f. 2. — Conidiophoris altioribus 240-900 \times 7-9, conidiis fere globosis vel late ellipsoideis, 21-27 \times 18-24, oosporis maioribus 36-48 μ diam.

Hab. in foliis vivis *Glycines hispidae*, prov. Austro-Ussuriensi (Rossiae Orient.).

83. *Peronospora narbonensis* E. Gäumann, Mitt. Naturf. Ges. Bern. 3520
1919 [1920], p. 179.

Hab. in *Vicia narbonensi*, Emilia, Italia bor.

84. *Peronospora Viciae sativae* E. Gäumann, Mitt. Naturf. Ges. Bern, 3521
1919 [1920], p. 184.

Hab. in *Vicia sativa*, Europa, America bor., Asia.

85. *Peronospora Harioti* E. Gäumann, Bull. Soc. neuchâtel. Sc. Nat. 3522 t. XLIII, 1919, Extr. p. 4, fig. 1-2. — Caespitulis densis, brunneo-violaceis, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis vel plurimis (1-14) e stomatibus exeuntibus, 180-350 μ altis, gracilibus, trunco $0,5\frac{2}{3}$, totius altitudinis efficienti, 6-10 μ crasso, basi saepe leviter tumida; ramis 3-6 ies dichotome ramosis, leviter curvatis; furcis terminalibus rectangulis, 10-25 μ longis, fere leviter curvatis; conidiis late ellipsoideis vel paene globosis, leniter flavis, 16-31, fere 21-26 μ longis, 14-27, fere 18-23 μ latis. Longitudine media 23,14 μ , latitudine media 20,74 μ . Oosporis ignotis.

Hab. in foliis vivis *Buddleiae globosae* Hope, in Gallia centrali. — *Per. sordidae* proxima sed characteribus conidiorum diversa.

86. *Peronospora americana* E. Gäumann, Ann. Cons. et Jard. Bot. 3523 Genève, v. XXI, 1919, p. 21, fig. 5. — Caespitulis mollibus, brunneo-violaceis, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis vel plurimis (1-9) e stomatibus exeuntibus, 250-600 μ altis, trunco $0,5\frac{2}{3}$, totius altitudinis efficienti, 8-13 μ crasso; 4-8 ies dichotome ramosis, furcis terminalibus 10-25 μ longis, rectangulis, leviter curvatis; conidiis leviter brunneis, longe ellipsoideis, 24-43, fere 33-38 μ longis, 12-28, fere 16-22 μ latis. Longitudine media 34,43 μ , latitudine media 19,14 μ . Oosporis singulis in foliis marcidis, 19-43 μ diam., episporio flavo, crasso, valde sed irregulariter rugoso Nebraska, Amer. bor.

Hab. in foliis vivis *Polygoni ramosissimi* Michx., Nebraska, Amer. bor.

87. *Peronospora Jaapiana* P. Magn., Ber. deutsch. bot. Ges. XXVIII 3524 Bd., 1910, p. 250, tab. VII. — Hyphis 225,55-329,93 μ long., ramulis supra medio pluries dichotomicè divisis, apice angustatis superioribus brevibus acutis, patentibus; conidiis ovoideis utrinque rotundatis epapillatis e violaceo flavidis, 25-34 \times 16,5-18.

Hab. in foliis *Rheirhapontici*, Trignitz (Priegnitz), Germania (O. JAAP). — *Per. Rumicis* affinis.

88. *Peronospora Agrorum* E. Gäumann, Mitt. Naturf. Ges. Bern. 1919 3525 [1920], p. 179.

Hab. in *Androsace septentrionali*, Suecia.

89. *Peronospora alpicola* E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 3526 [1920], p. 182.

- Hab.* in *Ranunculo aconitifolio*, pyrenaeo, Segui-
guieri, in Alpibus Helvetiae, Vogesen, Schwarzwald, Tirolia.
90. *Peronospora hiemalis* E. Gäumann, l. c. p. 183. 3527
Hab. in *Ranunculo acri*, Europa, America bor., Asia occ.
91. *Peronospora Ranunculi* E. Gäumann, l. c. p. 183. 3528
Hab. in *Ranunculo repenti*, Europa, America bor.
92. *Peronospora apiospora* Poirault, Bull. Assoc. Nat. de Nice, 1915 3529
p. 8 (extr.). — Maculis amplis griseo-violaceis; conidiophoris sparsis, albis, elatis, hypha primaria e basi leviter dilatata cylindrica, 7 μ cr., parce ramosa; ramis elongatis, leviter curvulis, apice conidigeris; conidiis longe piriformibus 46-48 \times 26; oosporis ignotis.
Hab. in foliis *Ranunculi graminei*, Caussols, Alp. Marit. — Diversa a *Per. Ficariae* et *Per. pygmaea*, Ranunculacearum incolis.
93. *Peronospora Aparines* (De Bary) E. Gäumann, Svensk Bot. Tidskr., 3530
Bd. 12., 1918, p. 444, *Peronospora calotheca* De B. γ *Aparines* De By., Ann. Sc. Nat. Bot. (1863) p. 112. — Caespitulis densis, griseis, totum tergum foliorum tegentibus; conidiophoris singulis vel binis e stomatibus exeuntibus, 250-750 μ altis; trunco $\frac{1}{3}$ - $\frac{4}{5}$ totius altitudinis efficienti, 9-14 μ crasso, basi leniter tumida; parte summa arboris 4-7 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, leviter curvatis, ramulis utrisque fere aequilongis (6-21 μ); conidiis late ellipsoideis, fulvo-violaceis, 22-38, fere 29-34 μ longis, 17-29, fere 21-25 μ latis; longitudine media 31,18 μ latitudine media 22,66 μ . Oosporis globosis, flavis, 27-43 μ diam., episporio dense reticulato.
Hab. in foliis *Galii Aparines* L., Europa media et bor.
94. *Peronospora borealis* E. Gäumann, Svensk Bot. Tidskr. Bd. 12., 3531
1918, p. 444; Mitt. Naturf. Ges. Bern, 1919 [1920], p. 178. — Syn. *Per. calotheca* Auct. — Caespitulis mollibus, griseis, tergum foliorum nonnulla parte tegentibus; conidiophoris singulis vel binis e stomatibus exeuntibus, 250-450 μ altis, trunco $\frac{1}{3}$ - $\frac{2}{3}$ totius altitudinis efficienti, 6-9 μ crasso, basi leviter tumida; parte summa arboris 4-6 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, leviter curvatis, ramulis utrisque longitudine fere aequali (7-14 μ); conidiis ellipsoideis, fulvo-violaceis, 21-34, fere 25-29 μ longis, 11-23, fere 15-20 μ latis; longitudine media 27,33 μ latitudine media 17,31 μ . Oosporis ignotis.
Hab. in foliis *Galii borealis* L., Europa bor., America bor.
95. *Peronospora insubrica* E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 3532

[1920], p. 178.

Hab. in Galio purpureo, in Cant. Ticino, Helvetiæ.

96. *Peronospora silvatica* E. Gäumann, Svensk Bot. Tidskr. Bd. 12., 3533 1918, p. 445. — Syn. *Per. calotheca* Auct. — Caespitulis mollibus, griseis, tergum foliorum nonnulla parte tegentibus; conidiophoris vel singulis vel trinis e stomatibus exeuntibus, 200-350 μ altis; trunco $\frac{2}{3}$ totius altitudinis efficienti, 8-14 μ crasso, basi leviter tumida, parte summa arboris 4-8 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, leviter curvatis, ramulis utrisque fere aequilongis (5-12 μ); conidiis paullum violaceis, saepe minutissime papillatis, late ellipsoideis, 14-31, fere 20-25 μ longis, 9-24, fere 15-19 μ latis; longitudine media 22,72 μ , latitudine media 17,26 μ . Oosporis ignotis.

Hab. folia Galii silvatici L., Europa media et bor.

97. *Peronospora Galii veri* E. Gäumann, Svensk Bot. Tidskr., Bd. 12., 3534 1918, p. 144. — Syn. *Per. calotheca* Auct. — Caespitulis griseis, densis, totum tergum foliorum tegentibus; conidiophoris singulis vel plurimis (1-14), e stomatibus exeuntibus, fere 400-550 μ altis, trunco $\frac{3}{4}$ totius altitudinis efficienti, 7-9 μ crasso, basi leviter tumida; parte summa arboris 6-8 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, rectis vel leviter curvatis, ramulis utrisque fere aequilongis (6-12 μ); conidiis ellipsoideis, fulvis, 19-34, fere 27-31 μ longis, 11-23, fere 16-19 μ latis; longitudine media 27,12 μ , latitudine media 17,75 μ . Oosporis ignotis.

Hab. folia caulesque Galii veri L., Europa media et bor.

98. *Peronospora minima* Wilson, Mycologia 1914, p. 209, t. 136, f. 3535 18-22. — Hypophylla; conidiophoris late effusis, caespitosis, griseis, maculis epiphyllis decoloratis; conidiophoris rectis v. flexuosis, 2-10 fasciculatis, brevibus, pauci ramosis, 150-300 \times 8-10, 1-3 v. 4 ies ramosis, ramis rectis, ultimis conoideis, 15-20 \times 4-6, v. conidiophoris minimis cum 3-4 conidiis; conidiis globosis, dilute aureo-brunneis, 28-32 μ ; oosporis aureis subglobosis, 65-80 μ diam., episporio ruguloso.

Hab. in foliis Saxifragæ cernuæ, Tromsø Norvegia (G. LAGERHEIM).

99. *Peronospora indica* Sydow, Ann. Mycol. 18., 1920, p. 157, cum 3536 icone. — Caespitibus laxis, albidis; conidiophoris singulis vel paucis erumpentibus, 359-500 μ altis, basi 5 $\frac{1}{2}$ -7 μ latis, pluries dichotome ramosis; ramis primariis oblique erectis, paenultimis plerumque

valde undulato-curvatis, ultimis saepius inaequalibus rectis vel parum curvatis; conidiis subglobosis vel obovatis, 23-30 \times 16-24; oosporis immaturis tantum visis, brunneolis, 30-34 μ diam.

Hab. in foliis *Calceolariae scabiosifoliae*, Dehra Dun, Indiae or. (E. J. BUTLER).

100. *Peronospora Celsiae* H. et P. Syd. in Syd. et Butl., Ann. Mycol. 3537 X, 1912, p. 245. — Caespitulis densiusculis, primitus albidis, dein pallide griseis v. griseo-violaceis; hyphis conidiophoris plerumque pluribus erumpentibus, 300-600 μ alt. basi μ 7-10 μ cr.; ramis 4-7 ies dichotome partitis, ascendentibus, penultimis valde curvatis; ramulis ultimis plerumque leviter curvatis aut omnibus aequilongis aut uno plus minusve brevioribus; conidiis late ellipsoideis, obtusis quoad formam et magnitudinem vix variabilibus, 17-21 \times 15-17, pallidissime violaceis; oosporis nondum visis.

Hab. in foliis *Celsiae coromandelianae*, Pusa Indiae or. (E. J. BUTLER). — *P. Linariae* videtur proxima.

101. *Peronospora Pedicularis* Björn Palm, in Svensk Bot. Tidskr., Bd. 3538 5., 1911, p. 356. — Conidiophoris 270-325 μ alt. ad 10,5 μ crass. basi tumido-inflatis, saepe 14-16 μ ; ramis 4-6 ies dichotome partitis, angulatum divergentibus, ramulis ultimis leviter recurvatis; conidiis maximis, latis, obtuse ovatis 26,5-34 μ long. 18,5-22,5 crass., membrana pallide violacea, contentu flavidulo. Oosporis maturis non visis, junioribus autem in parenchymate folii copiosissime observatis.

Hab. in *Pediculari lapponica*, Lapponiae Tornensis in locis Albisko Björkliden, Vaggejokk, Scandinavia.

102. *Peronospora verna* E. Gäumann, Ann. Mycol. 16., 1918, p. 198, 3539 fig. 1 c. — Differt a *Peronospora agresti* conidiis maioribus, 10-27, fere 19-22 μ longis, 8-23, fere 16-20 μ latis. Longitudine media 20,90 μ latitudine media 17,76 μ .

Hab. in foliis vivis *Veronicae serpyllifoliae* L., Stockholm Suecia. — *Peronosporae* formae in foliis vivis *Veronicae arvensis* L., *V. Chamaedrys* L., *V. praecocis* All., *V. prostratae* L., *V. teucrii* L., *V. Tournefortii* Gmel. nec non *V. vernae* L., huc pertinere videntur.

103. *Peronospora saxatilis* E. Gäumann, Ann. Mycol. 16., 1918, p. 198, 3540 fig. 1 b. — Differt a *Peronospora agresti* conidiis maioribus, 19-40, fere 28-32 μ longis, 12-29, fere 19-23 μ latis; longitudine media 30,75 μ , latitudine media 21,63 μ .

Hab. in foliis vivis *Veronicae fruticantis*, Waadt-

länderalpen Helvetia.

104. *Peronospora aquatica* E. Gäumann, Ann. Mycol. 16., 1918, p. 149. — 3541

Differt a *Peronospora agrestis* conidiis maioribus 24-43, fere 33-38 μ longis, 9-27, fere 20-23 μ latis. Longitudine media 35-26 μ , latitudine media 21,02 μ .

Hab. in *Veronica Anagallide*, Europa, America bor.

105. *Peronospora grisea* (Unger 1847) De B. — Syll. VII, P. I p. 255 — 3542

Secundum E. Gäumann (Ann. Mycol. 16., 1918, p. 189) species *Ungariana* in *Veronica Beccabunga* tantum viget, cum conidiis, 23,65 \times 16,10, in aliis gen. *Veronicae* speciebus novam speciem *Per. agrestis* cum subspeciebus pluribus extat.

106. *Peronospora arvensis* E. Gäumann, Ann. Mycol. 16., 1918, p. 198. — 3543

Differt a *Peronospora agrestis* conidiis maioribus, 14-34, fere 22-26 μ longis, 11-31, fere 19-23 μ latis, longitudine media 24,67 μ , latitudine media 21,28 μ .

Hab. in foliis vivis *Veronicae hederifoliae* L. — *Peronosporae* forma in foliis vivis *V. triphyllae* huc pertinere videtur, Altenburg Hungaria (LINHART, Fungi hung. 488).

107. *Peronospora silvestris* E. Gäumann, Ann. Mycol. 16., 1918, 3544

p. 199. — Differt a *Peronospora agrestis* conidiis maioribus, 22-39, fere 28-34 μ longis, 10-26, fere 18-22 μ latis. Longitudine media 31,74 μ , latitudine media 49,94 μ .

Hab. in foliis vivis *Veronicae officinalis* L., Marienspring prope Cladow Germania (P. SYDOW, Myc. March. 2969). — *Peronosporae* forma in foliis vivis *V. urticifoliae* Jacq. fors. huc pertinet.

108. *Peronospora agrestis* E. Gäumann, Ann. Mycol. 16., 1918, p. 198. — 3545

Caespitulis mollibus, griseo-violaceis, totum tergum foliorum tegentibus; conidiophoris singulis vel plurimis e stomatibus emergentibus, 200-600 μ altis, 4-8-ies dichotome ramosis; trunco $\frac{1}{2}$ - $\frac{2}{3}$, totius altitudinis efficienti, 5-9 μ crasso, basi leviter tumida; ramis leviter curvatis vel undulatis; furcis terminalibus rectangulis, fere literae graecae sigma similiter curvatis vel ramis utribus paene rectis, 8-20 μ longis; conidiis ellipsoideis, leviter griseo-violaceis, 9-26, fere 17-20 μ longis, 8-23, fere 15-18 μ latis. Longitudine media 19,07 μ , latitudine media 15,24 μ . Oosporis 36-57 μ diam., epi-
sporio crasso, flavo, levi vel paullo reticulato.

Hab. in foliis vivis *Veronicae politae* Fries, Helvetia. Fungus in foliis vivis *Veronicae agrestis* L. huc pertinere videtur.

109. *Peronospora palustris* E. Gäumann, Ann. Mycol. 16., 1918, p. 198, 3546
fig. 1 a. — Differt a *Peronospora agresti* conidiis maioribus, 20-36,
fere 26-39 μ longis, 10-27, fere 17-20 μ latis. Longitudine media
27,46 μ latitudine media 18,66 μ .

Hab. in foliis vivis *Veronicae scutellatae* L., Svend-
berg Suecia.

Species gen. *Peronosporae* secundum ordinem alphabeticum Familiarum
et matricarum dispositae:

Berraginaceae 1, Campanulaceae 2, Caryophyllaceae 3-6, Chenopodiaceae 7-17,
Compositae 18-19, Cruciferae 20-71, Dipsacaceae 72, Euphorbiaceae 73-76, La-
biatae 77, Leguminosae 78-84, Loganiaceae 85, Polygonaceae 86-87, Primulaceae
88, Ranunculaceae 89-92, Rubiaceae 93-97, Saxifragaceae 98, Scrophulariaceae
99-109.

BREMIA Regel. — Syll. VII p. 243.

1. *Bremia ovata* K. Sawada, Botan. Magazin Tokyo, 1914, p. 83, 3547
cum icon.; Mycologia 1919, p. 85. — Hyphis 7 μ cr.; conidiophoris
caespitosis, usque 1 mm. long. 3-8-ies ramosis, plerumque 7-8
septatis, ramulis brevibus, terminalibus sphaeroideo-v. capitato-in-
crassatis, 3-7 sterigmatibus praeditis; sterigmis 6-8 μ long.; con-
idiis ovoideis v. oblongo-ovoides, infra minute pedicellatis, papilla
apicali obsoleta, 14-18 \times 10-13, hyalinis, granulatis.

Hab. in *Crepide japonica*, Taiwan, Formosa, Japonica.

2. *Bremia Saussureae* K. Sawada, Botan. Mag. Tokyo, 1914, p. 80, 3548
cum icon.; Mycologia 1919, p. 85. — Maculis foliiculis pallide flavidis,
polygoniis, 15 mm. circa latis, caespitulis hypophyllis densis albidis
insidentibus; hyphis intercellularibus granulatis in mesophyllo dif-
fusiis 8-17 μ cr.; haustoriis ovoideis, obovodeis v. irregularibus
14-27 \times 5-14; conidiophoris singulis v. caespitosis, elongatis usque
mm. 1,021, 3-6-ies ramosis, ramulis omnibus brevibus obtusis,
plerumque 5-6 septatis, terminalibus incrassatis, sterigmatibus
4-6 praeditis, 6-10 \times 3; conidiis e late ellipsoideis elongato-oblongis,
supra depresso papillatis, infra pedicellatis, granulatis, 24-57 \times 18-28,
hyalinis.

Hab. in foliis *Hemisteptae carthamoidis* (= *Saus-
sureae affinis*), Taiwan, Formosa, Japonia.

3. *Bremia Sonchi* K. Sawada, Botan. Magazin Tokyo, 1914, p. 80, 3549
cum icon.; Mycologia 1919, p. 84. — Maculis foliiculis v. cauliculis,
parvis, polygoniis, raro totum folium tegentibus; hyphis super-

ficulibus, sparsis arachnoideis, intercellularibus hyalinis, minute granulatis 8-17 μ cr., haustoriis sphaeroideis, quandoque obovoideis v. subclavatis; 11-24 \times 7-13, conidiophoris caespitosis 230-560 μ long. supra medium 3-6-ies ramosis, infra parum inflatis, ramis angustis curvis, ramulis terminalibus apice sphaeroideis, 2-6 sterigmatibus praeditis, sterigmatibus 4-7 \times 2,5-3; conidiis plerumque globosis raro ovoideis, supra depresso papillatis, infr. anguste pedicellatis, contentu protoplasmico lucem refrangenti, 17-24 \times 13-21.

Hab. in foliis caulibusque *Sonchi oleracei*, Formosa Japonia. — *B.* *Lactueae* proxima *) sed ramulorum situ et magnitudine, apicis ramulorum forma satis diversa.

4. *Bremia graminicola* Naoumoff, Bull. Soc. Mycol. Fr. 1913, p. 274, 3556 t. XIII f. 1-3. — Maculis primo lutescentibus dein fuscis, subinde etiam totum folium occupantibus; caespitulis floccosis, albidis, dein griseis, conidiophoris hypophyllis, rarius epiphyllis, usque ad 600 μ alt. 9-10 μ diam., inferne in bulbo globoso inflatis, superne 5-6-ies dichotomis, ramis rigidis alterne ultro citroque curvatis, ramulis ultimis in vesiculam inflatis, papillas 4 insidentibus. Conidiis fere globosis, uno apice quandoque leniter acuminatis, hyalinis, 12 μ diam. — Oosporis nondum cognitis.

Hab. in foliis vivis *Arthraxonis ciliaris* in prov. Austro-Ussuriensi Rossiae orient. (NAOUMOFF) et in China (MIYAKE, in Bot. Mag. Tokyo, 1914).

BREMIELLA G. W. Wilson. Mycologia 1914, p. 195. — Hyphae fertiles solitariae v. fasciculatae e stomatibus erumpentibus, dichotome-v. pseudomonopodio-ramosae; ramuli terminales longi, apice in vesiculam apophysatam abientes; conidia hyalina, pyriformia, apice papillata, per zoosporas evacuantia; oosporae subrugosae.

1. Huc pertinet *Peronospora megasperma* Berlese et tunc *Bremiella megasperma* (A. Berl.) G. W. Wilson vocanda. 3551

PERONOPLASMOPARA Clint. — ? Syn. *Pseudoperonospora* Rostow., Syll. XVII p. 520.

1. *Peronoplasmopara portoricensis* Lamkey in F. L. Stevens, Mycologia 3552

*) De qua cnfr. doct. monogr. Cl. J. SCHWEIZER, *Die kleinen Arten bei Bremia Lactueae* Reg. und ihre Abhängigkeit von Milieu-Einflüssen — Inaug. Diss. Univ. Bern 1919 (Verh. thurgau. naturf. Ges., Heft. 23., 1919. 61 pag. cum icon.).

12., 1920, p. 52. — Maculis hypophyllis irregularibus; conidiophoris e stomatibus singulis v. 2-3 emergentibus, 80-300 \times 5,5-11, pseudomonopodialiter 3-5 ramosis, ramulis ultimis acutatis 9-18 μ long.; conidiis ellipsoideis, hyalinis, 14-24 \times 16,5-28; oosporis non praesentibus.

Hab. in foliis *Meliae Azedarach* [Meliaceae], Guanica Florida, America trop.

2. *Peronoplasmodium* Humuli Miyabe et Takahashi (descriptio nulla, 3553 cnfr. Syll. XXI, p. 861).

*) **PLASMOPARA** Schröter — Syll. VII p. 239, IX p. 342, XI p. 243, XIV p. 460, XVII p. 520, XXI p. 861.

1. *Plasmopara Wildemaniana* P. Henn. — Syll. XXI p. 861. — var. *macrospora* K. Sawada, Journ. Formosan Nat. Hist. Soc., 1914, pp. 2-4. — Tanaka, Mycologia 1922, p. 87. — A typo praecipue recedit conidiis majoribus, 14-18 \times 11-13.

Hab. in foliis *Justiciae procumbentis* [Acanthaceae], in Insula Formosa Japoniae.

2. *Plasmopara Acalyphae* (Wilson) G. W. Wilson, Mycologia 10., 1918, 3555 p. 169, *Physotheca* A. Wilson, l. c. — Caespitulis hypophyllis sparsis densis albicantibus, maculis epiphyllis subbullatis e decoloratis flavescens v. obscure brunneis demum arescentibus quandoque infra rubescentibus; conidiophoris solitariis v. 2-3 e stomatibus exeuntibus, 300-500 \times 5-7, supra 4-5-ramosis; ramis elongatis rectiusculis, ramulis saepe adpressis, ramulis ultimis rectis, leniter inflexis, brevibus, 4-10 μ long., plus minus conoideis et late truncatis; conidiis brunnescentibus, e ovoideis globosis, 12-22 \times 10-16; oogoniis non visis.

Hab. in *Acalypha virginica* [Euphorbiaceae], Madison Wisc., Amer. bor. (T. T. DAVIS). — *Per. illinoisensi* Farl. et *australi* Speg. proxima.

3. *Plasmopara cephalophora* Davis, Parasit. Fungi Wisconsin VI; 3556 Trans. Wisc. Ac. of Sc. etc. XIX, 1919, II, p. 709, cum icon. — Conidiophoris hypophyllis, effusis, crassis, rectis quandoque subclavatis, 150-270 \times 6-14, simplicibus v. apice in ramulos parvos, breves (6-15 μ) sterigmata cylindracea, recta, truncata, quandoque

*) Cnfr. WARTENWEILER A., Beiträge zur Systematik und Biologie einiger Plasmopara-Arten, Ann. Mycolog. 16., 1918, pp. 249-299, cum icon. et 3 tab.

subinflata gerentes divisis; conidiis hyalinis, e ellipsoideis fusoido-oblongis, utrinque plus v. minus acutis, uno latere depressis, stipitatis, apice papillatis, 45-70 × 20-33.

Hab. in foliis *Physostegiae parviflorae* [Labiatae], Shioc-ton, Plover, Dexterville, Wisc., Amer. bor. — Oosporis immaturis raro inventis.

4. *Plasmopara nivea* (Ung.) Schr. — Syll. VII p. 240. — A Cl. Ca- 3557
spary anno 1855 in *Peronosp. Umbelliferarum* (quae prioritatis causa ut synon. habenda est) distinctae sunt varietates (potius formae specificae), sequentes :

Plasmopara Conii (Casp.) Trotter, forma minor, stipitibus $\frac{1}{17}$ - $\frac{1}{11}$ ''' altis, ordinibus ramorum 1-2 ramellis ultimi ordinis brevissimis, subulatis, rectis, acrosporibus majoribus. 3558

Hab. in *Conio maculato*, Europa media.

Plasmopara Angelicae (Casp.) Trott., forma major stipitibus $\frac{1}{13}$ - $\frac{1}{7}$ ''' altis, ordinibus ramorum 2-4, ramellis ultimi ordinis longioribus, paululum curvatis; acrosporibus majoribus. 3559

Hab. in *Angelica silvestre*, Europa media.

Plasmopara Chaerophylli (Casp.) Trott., ut antecedens, ramellis ultimi ordinis rectis. 3560

Hab. in *Chaerophyllo silvestre*, Europa media.

Plasmopara Aegopodii (Casp.) Trott., forma major, stipitibus $\frac{1}{6}$ - $\frac{1}{5}$ ''' altis, ordinibus ramorum 2-3, ramellis ultimi ordinis rectis, brevissimis, acrosporibus majoribus $\frac{1}{175}$ - $\frac{1}{142}$ ''' latis $\frac{1}{145}$ - $\frac{1}{123}$ ''' long. 3561

Hab. in *Aegopodio Podagraria*, Europa media.

SCLEROSPORA Schroeter. — Syll. VII p. 238, IX p. 341, XIV p. 461, XVII p. 520, XXI p. 861.

1. *Sclerospora Mischanthi* T. Miyake, Rep. of work of Sugar exp. St. Gov. Formosa, Pathol. Bull. I (1911), 61 pag. 9 tav. 3562

Nomine nobis tantum nota.

Hab. in *Mischantho* (Graminaceae), in Japonia.

2. *Sclerospora Oryzae* Brizi, La peronospora del riso, « Natura » Milano 1919 v. 10., pp. 168-180, cum tab. col. — *Scl. macrospora* Sacc., Gabotto, Giornale di risicoltura, Vercelli 1915, n. 18., pp. 292-294, cum icon. 3563

Hab. in foliis, culmis et inflorescentiis *Oryzae sativae*, Italia bor. et Japonia.

3. *Sclerospora Sacchari* Miyake, Rep. of work of Sugar experiment Stat. Gov. Formosa, Path. Bull. I (1911), 61 pag. 9 tav. 3564

Hab. in plantis *Sacchari officinarum*, Zeae *Maydis* et *Euchlaenae luxuriantis* cultis in ins. Formosa,

nec non in plantis Sacch. off. in Quensland et Ins. Fiji. — Conidiophora 170 μ longa.

4. **Sclerospora javanica** Bj. Palm, Medeeling. van het Laborator. voor 3565
Plantenziekten n° 32 p. 18 cum icon., Batavia 1918, *Peronospora Maydis* Rac. 1897, Syll. XIV p. 460, non Butler. — Maculis striatis albo-flavis, saepe totum folium occupantibus; mycelio intercellulari; haustoriis filiformibus dichotome ramosis; conidiophoris 1300 \times 20-25, basin versus septatis; sterigmatibus 6-9 μ long., rectis; conidiis plerumque oblongo-rotundatis, 19-26 \times 15-20, tubo germinantibus; oosporis non visis.

Hab. in foliis culmisque Zeae Maydis et Z. Maydis \times Euchlaenae luxur. in Java, Madoerah et Sumatra.

5. **Sclerospora Maydis** (Raciborski) Butler, The downy mildew of Maize, 3566
Mem. of Depart. of Agricult. in India, Bot. Ser. vol. V n. 5 (1913) (*Per. Maydis* Racib.) Palm, l. c. p. 18. Syll. XIV p. 460. — Maculis albo-flavis, matricem leviter deformantibus; mycelio intercellulari; conidiophoris plus minusve 150 μ long.; sterigmatibus 15-20 μ long., rectis; conidiis oblongis, apice obtuse rotundatis 28-45 \times 16-23, tubo germinantibus; oosporis non visis.

Hab. in foliis culmisque Zeae Maydis et Euchlaenae luxuriantis in India oriental. (BUTLER) et in ins. Philippinis (BAKER), nec non in Bengala.

6. **Sclerospora philippinensis** W. H. Weston, Journ. Agric. Research 3567
19., 1920, p. 118, cum tabulis. — Syn. *Scl. Maydis* Reinking 1918, Philipp. Journ. of Sc. S. A., 13., n. 5, cum icon et tab., non Butler — Maculas lineares v. irregulares, albido-flavas v. pallidas efficiens saepe totum folium discolorans et matricem plus minusve deformans; hyphis mycelicis inter cellulas in totas partes praeter radicem crescentibus, ramosis, tenuibus, plerumque 8 μ diam., sed irregulariter constrictis inflatisque; haustoriis simplicibus, vesiculiformibus subdigitatisve, minutis, 8 \times 2; conidiophoris e stomatibus exeuntibus, erectis 150-400 \times 15-26, in parte inferiore cellulas basiales gerentibus, superne 2-4-dichotome-ramosis, ramis robustis cum sterigmatibus conoideo-subulatis 10 μ long. leviter curvatis; conidiis elongato-ellipsoideis, elongato-ovoideis v. rotundato-cylindraceis variae dimensionis, plerumque 27-39 \times 17-21, hyalinis, episporio tenue, intus minute granulosi, apice leviter rotundatis; basi apiculo minuto praeditis semper per tubum germinantibus; oosporis nondum visis.

Hab. in foliis, vaginis, glumis, culmis et inflorescentiis praecipue

Zeae Maydis, rarius *Euchlaenae* luxuriantis et *Andropogonis* Sorghi, per omnes partes in Ins. Philipp.

7. *Sclerospora spontanea* W. H. Weston, Journ. Agric. Research, 20., 3568 1920, p. 678, tab. 76-79. — Conidiophoris 350-550 μ long. apice expansis, cellula basali 5-8 μ cr. 140-260 μ longa; supra 22-32 μ ad septum constrictis et tunc 20 μ cr., infra ramos constrictulis; ramis elongatis angustis parum recurvato-adscentibus; sterigmatibus 13 μ long.; conidiis cylindraceis v. cylindraceo-ellipsoideis, 39-45 \times 15-17; oosporis hucusque ignotis.

Hab. in *Zea* Mays, Saccharo spontaneo et officinarum, quibus valde noxia, in Ins. Philippinis. — *Scl. philippinensi* affinis sed notis datis magis elongata et habitu graciliori, diversa.

BASIDIOPHORA Roze et Cornu — Syll. VII p. 239, IX p. 342.

1. *Basidiophora Kellermanni* (Ell. et Halst.) — Syll. IX p. 342 — var. 3566 *paupercula* Peck, N.Y. State Mus. Bull. 150 [1910] p. 64 (1911). — A typo differt maculis paucis, parvis, sparsioribus, candidis; oosporis globosis minoribus, 20-24 μ diam.

Hab. in foliis vivis *Ivae xanthifoliae* [Compositæ], Ohama, New Mexico, Amer. bor. (W. T. SWINGLE).

LABOULBENIOMYCETÆ PEYR. *)

* Syll. VIII p. 909, IX p. 1130, XIV p. 725, XVI p. 674, XVII p. 915, XXII p. 1.

DIMEROMYCES Thaxt. — Syll. XIV p. 725, XVI p. 674, XVII p. 915, XXII p. 7.

1. *Dimeromyces Corynitis* Thaxt., Proc. Amer. Acad. 1912, p. 157, 3570 Spez. Lab. Arg. fig. 55.

Hab. in elytris *Corynitis ruficollis*, La Plata Arg. — Ind. masc.: long. tot., incl. pede (16 μ) 50-60 \times 9; cellula append. 14-20 \times 10-12; antheridium 35 μ , cell. ped. 9-18 \times 6, venter 10 \times 12. — Sporidia (intra perith.) 60 \times 9; perith. 150-215 \times 30-40; recept. ad apicem append., incl. pede, 80 \times 100 μ .

2. *Dimeromyces Anisolabis* Thaxt., Proc. Amer. Accad. 1912, p. 156. 3571 Speg., Lab. Arg. fig. 54.

Hab. in superf. inf. abdominis *Anisolabis anulipedis*, Palermo et La Plata, Argent. — Indiv. masc.: long. tot. ad apicem antheridii (cum pede) 58; appendix 20 μ ; recept. excluso pede 18-20 μ , antherid. incl. cellula ped. 31 \times 8. — Ind. fem.: perith. 75-100 \times 14; recept., excluso pede, 25-30 \times 20; appendix primaria 40 μ app. inferiores, cellula fulcrante incl., 60-70 μ ; long. tot. ad apicem perith., incluso pede, 100, 150 μ .

3. *Dimeromyces Homophoetae* Thaxt., Laboulb. in Chrysom. 1914, p. 19. 3572

Hab. in prothorace et antennis *Homophoetae aequinoctialis*, Guatemala, Grenada ex Antill., Trinidad. — Ind. masc.: long. total. ad apicem append. 60 μ , ad apicem antheridii 80 μ et antheridii proliferi 112 μ ; antherid. normale cum pede 35-40 \times 6.

*) Cfr. praeter Contributiones Thaxterianas, illas aequae eximias de Laboulbenialibus italicis et exoticis cl. prof. CAROLI SPEGAZZINI, imprimis vero ejus monographiam: Revision de las Laboulbeniaceas Argentinas, in Anal. del Mus. Nac. Hist. Nat. de Buenos Aires, tom. XXIX (1917) iconibus praeclaris et speciebus per multis novis ditissimam. Diagnoses latinae operis praetium augent. Tamen, ut olim monuit Saccardus, in determinandis his perquam singularibus plantulis icones maxime necessariae. Sincere fatemur expositionem sequentem e fontibus diversis haustam et tunc disparem, nonnisi ut inventarium specierum inservire posse.

- Ind. fem.: sporidia $32 \approx 3,5$; peritheec. cum pede $100-190 \approx 20-35$; longit. tot. incluso pede $100-190 \approx 20-35$; long. tot. appendicis primariae 70μ , ad apicem perithecii $140-250$; appendix longior $90-110 \mu$.
4. *Dimeromyces Hermaeophagae* Thaxt., Laboulb. on Chrysom. 1914, p. 21. 3573
Hab. in antennis *Hermaeophagae insularis*, Grenada ins. Antill. (BINES). — Ind. masc.: long. tot. ad apicem appendicis 35μ , ad apicem antheridii 50μ , pes antheridii 16μ , venter et rostrum 18 ; appendix 17μ ; Ind. fem.: perith., excluso pede, $60-70 \mu$; appendices secundariae $60-70 \mu$, primariae $20-25 \mu$; long. tot. ad apicem perith. $75-90 \mu$.
5. *Dimeromyces Aulecophorae* Thaxt., Laboulb. on Chrysom. 1914, p. 20. 3574
Hab. in elytris *Aulecophorae posticae*, Perak Malacae — Ind. masc.: recept. $32 \approx 10$, excl. pede; cellula basil. appendicis $16 \approx 6$ et pars dist. $30-40 \approx 4$; antherid. cum pede $30-40 \approx 5-6$, pes 11μ long. — Ind. fem.: perith. $175-250 \approx 24-28$; sporidia $32 \approx 30$; recept. $65 \approx 20$; cell. basil. appendicis primariae $20 \approx 6,5$, append. longior $130 \approx 3,5$.
6. *Dimeromyces Longitarsi* Thaxt., Laboulb. on Chrysom. 1914, p. 22. 3575
Hab. in elytris *Longitarsi testacei*, L. subcincti, et *Aphthonae Deyrollei*, Arkansas, Am. bor. et Trinidad — Perith. $80-120 \approx 20-25$; appendix secundaria $85-100 \mu$, appendix primaria inclusa spina 25μ .
7. *Dimeromyces brachiatus* Thaxt., Proc. Amer. Acad. 1915, p. 6. 3576
Hab. in elytris *Heterophagae* sp., Peradeniya Ceylon. — Ind. mas.: receptac. $46 \approx 12$; pes 18μ ; appendices $28 \approx 4$; antheridium $27 \approx 9$. — Ind. fem.: peritheec. $90-120 \approx 15-20$, cell. basil. $12 \approx 8$; receptac. $18-22 \approx 4$; axis secundarius $580 \approx 12$, appendix $20-28 \approx 4$.
8. *Dimeromyces Petchi* Thaxt., Proc. Amer. Acad. 1915, p. 7. 3577
Hab. in prothorace *Tachys* (?) minutae speciei, Peradeniya Ceylon (PETCH). — Ind. masc. recept., incluso pede et cellula basilari primariae append., $45-80 \approx 15-20$, antheridia $28 \approx 9$; ind. fem. sporidia $30 \approx 4$; perithecia $75 \approx 20-24$; receptaculum $55-65 \approx 25$; appendices $40-45 \approx 7-8$; long. tot. ad apicem perithecii $120-135$.
9. *Dimeromyces appressus* Thaxt., Proc. Amer. Acad. 1915, p. 8. 3578
Hab. in superficie infer. abdominis et in forcipe *Labiae pilicornis*, Peradeniya Ceylon — Ind. masc.: recept. excluso pede $10 \approx 9$; antherid. $18 \approx 6$; appendix $20-24$; longit. tot. ad apicem appendicis 30μ . — Ind. fem.: perith. $45 \approx 12$ pars ascig., pes $70-80 \approx 10$; sporidia $28 \approx 2,5$; receptac. inclusa cellula basil. $20 \approx 10$; appendix primaria excl. cellula basil. $12-16 \approx 5$; appendix secundaria $35-45 \approx 5,5$.

10. **Dimeromyces Lavagnei** Picard, Bull. Scient. France Belgique 50., 3579
1910-1917, p. 441. Descriptio ex Maire, III. Contrib. étude Laboulb.

Afrique du Nord, Alger 1920, p. 6, fig. 1. — Dilutissime lutescens; receptaculi contorti, 5-cellulares (73 μ long.), cellula basali obconica, ungue nigro basi hyalino, apice hyalino-punctato praedita, septo primo transversali, cellula subbasali triangulari, appendicem primariam gerenti; cellulis distalibus 3, subquadrangularibus, septis obliquis praeditis, quaque appendices secundarias 2 gerenti; app. primariae breves (40 \times 6), 4-cell., cellula basali triangulari minuta, cellulis mediis subelongatis parvis, cellula distali paullulum dilatata, elongata, subcompressa, apice rotundata; app. secundariae longiusculae (63-108 μ), peritheci apicem vix attingentes, angustae lineares, geminatae, cellula basali inflata, cellulis mediis cylindricis, cellula subterminali rigida, atrofusca, cellula distali longissima, flexuosa, compressa, sensim attenuata, apice obtusa; perithecio sessili, asymmetrico, curvulo, apice in rostrum brevem abruptiuscule attenuato; ostiolo rotundato regulari; cellula asco-genica elongata laterali; ascosporae fusiformes, 30 \times 3,5, 1-septatae, basi rotundatae, cellula superiore inferiore quintuplo longiore, calyptra gelatinosa septum non attingenti praedita. — Totus 167 μ long.

Hab. in *Microleste minutulo*, Lattes Herault Gallia (LAVAGNE), nec non in *M. laevipennis*, prope Hipponem Numidia.

11. **Dimeromyces Taxteri** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, 3580
t. VII 1914 p. 100. — Syn. *Dimeromyces falcatus* Thaxt., Proc. Amer. Acad. 1915, p. 4, non Paoli 1911.

Hab. in antennis *Grylli mitrati*, Semarang, Java. — Ind. masc.: long. tot., inclusa appendicis cellula term. (12-15 μ) et pede (25 μ) 80-94 \times 8; antheridium incluso pede 40 \times 5; ind. fem.: perith. 85-100 \times 20-24; sporida fem. 18 \times 3; long. tot. ad apicem append. 350-390 μ ; recept. 80 \times 20 e facie 30 μ ; append. secund. 45-70 μ .

12. **Dimeromyces Bordei** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, 3581

t. 11., 1920, Extr. p. 4, tab. I fig. 1-5. — Fungo masculo (totus 65-75 alt.) dilutissime rufo-brunneo; receptaculo e 3 cellulis obliquis contexto; cellula basali elongata obconica; cellulis superioribus subaequalibus, 2 antheridia composita et appendicem terminalem bicellularem, conicam, apice acutiuscula, antheridium superiorem subaequantem, hyalinam, gerentibus. Antheridiorum hyalinorum, lageniformium, in collum breviusculum rectum v. curvatum abruptiuscule contractorum pedicellis unicellularibus, dilu-

tissime rufo-brunneis, brevibus, cum cellulis vicinis concretescentibus. Fungi foeminei (tot. 160-200 μ alt.) concoloris receptaculo e 3 cellulis valde obliquis, contexto; cellula basali paullum elongata, cellulis superioribus brevioribus subaequalibus; cellula subbasali appendicem secundariam ventralem, erectam, hyalinam, flagelliformem, 4-6 cellularem, $\frac{2}{3}$ ad $\frac{3}{4}$ peritheci aequantem, basi cum cellula receptaculi distali et cum perithecio concretescentem, gerenti. Peritheci fusiformi-incurvati, asymmetrici, pedicello mox cum cellulis basalibus confuso, indistincto; perithecio apice in rostrum breviusculum ostiolum obtusum subhyalinum gerentem sensim attenuato, infra ostiolum et rostrum vix constricto; cellula ascogenica unica; ascosporis homomorphis, fusiformibus, hyalinis, laevibus, utrinque, acutis, 1-septatis, muco praeter apicem cellulae inferioris obvolutis; ascosporae cellula inferiori $\frac{1}{4}$ cellulae superioris aequanti.

Hab. in elytris *Thyamidis parvulae* Payk., prope Hipponem Reg. Numidiae, Africa bor.

13. *Dimeromyces Kamerunensis* Thaxter, Proc. Amer. Ac. of Sc. 53., 3582

1918, p. 700. — ♂ Exiguus, hyalinus dein leniter brunneo tinctus, axis tricellularis, cellulis parum longioribus quam crassioribus; antheridium unicum, raro duo, ventricosus, e parte distali curvula sensim angustatus 30×8 , pede nigro crassiusculo; appendices 20.4×4 . ♀ Axis receptaculi supra brunneum infra hyalinum, e 6-12 (v. ultra) cellulis superpositis efformatum, cellula basali pluries longiori quam crassiori sed basim versus leniter angustata; appendicibus erectis v. leniter divergentibus, demum obscure brunneis; peritheciis 1-2, uniformiter pallide flavido-brunneis, apice hyalinis appendicibus subaequantibus v. subbrevioribus $88-105 \times 14-21$, appendicibus 105×12 , appendicibus primariis circ. 25×3 .

Hab. ad capitem et crura *Oscinidae* (Diptera) ejusdam, Kamerun Africa trop — Proxima *D. coarctati*.

14. *Dimeromyces Oscinosomalis* Thaxter, Proc. Amer. Ac. of Sc., 53., 3588

1918, p. 701. ♂ perfecte hyalinus parietibus tenuibus praeditus, et tunc aegre visibilis, e tribus cellulis superpositis, inferiori latiori et infra parum inflata efformatus. Antheridiis unum v. duobus oblique superpositis, leniter divergentibus, receptaculo 25μ , antheridio 18×5 . — ♀ habitu sigmoidea. Axe receptaculi plerumque ex sex cellulis efformato, basali longiori quam latiori infra rhizoideo; appendicibus secundariis plerumque tribus raro quatuor, longis gracilibus demum obscure brunneis; peritheciis plerumque simplicibus, $50-65 \times 16-20$; receptaculo, processu rhizoideo excepto, $35-50$

$\approx 12-16$; appendicibus primariis 18μ , secundariis usque $125 \approx 8$, totus fungus $75-95 \mu$ long.

Hab. in inferiori parte abdominis *Oscinosomae* inaequali (Diptera), Sarawak Borneo. — *D. pedali* et *rhizophoro* proxima species; sed differt a *pedali* processu rhizoideo et forma terminatione peritheciali, a *rhizophoro* appendicibus longioribus processu rhizoideo simplici, etc.

15. *Dimeromyces pedalis* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3584 p. 699. — ♂ Hyalinus, axis tricellularis, cellula basilari latiori pede nigro bene evoluto praedita, caeteris angustioribus subaequalibus; antheridio erecto, e apice 28μ longo 8μ cr., antheridio proprio $18 \approx 5$, appendicibus $18 \approx 3$. ♀ Tota, sed praecipue appendices plus minus brunneo-flavido tinctae; axis receptaculi plerumque 8-cellularis utrinque parum acutatus; appendices primariae erectae terminales septo obscuro divisae, secundariae plerumque quatuor quodque tres, breviusculae; perithecium $42-52 \approx 14$; receptaculum $35-40 \approx 8$; sporis $18 \approx 2,5$; appendices primariae 30μ , secundariae $40-50 \mu$.

Hab. ad crura *Oscinosomae* inaequalis (Diptera), Sarawak Borneo. — Species inter *D. Oscinosomalis* et *D. coarctatus* media.

EUDIMEROMYCES R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 215.

♂ Ex tribus cellulis superpositis ab antheridio simplici terminatis efformatus; ♀ appendices primariae a receptaculo non distinctae, secundariae steriles nullae. Coeterum ut in *Dimeromyces* cui affinis.

1. *Eudimeromyces Chilotis* R. Thaxter, l. c. p. 216. — ♂, gracilis hyalinus tribus cellulis longitudine et crassitudine subconformibus, antheridio conoideo 12μ long.; totus cum pede $25 \approx 4$. — ♀ Hyalina; receptaculo e cellula basilari et plerumque e 4 cellulis subtransverse dispositis efformato; peritheciis pedicello incluso $65-75 \approx 14-15$, sporis $20 \approx 2,6$; receptaculo $14-17 \approx 11-13$; appendicibus longis $110-120 \approx 8$. Totus fungus ex apice peritheci $80-100 \mu$ long.

Hab. in elytra *Chilotis formosi*, Baños de Apoquindo et Corral, Chile, America austr.

DIMORPHOMYCES Thaxt. — Syll. XI p. 446, XIV p. 725, XVI p. 674.

1. *Dimorphomyces platensis* Speg., Lab. Arg. p. 517 fig. 60 — Masculus 3586 pallidus, appendice obtusiuscula, antheridio hyalino acute rostrato patente. Foemineus totus subincarnato-melleus, axi primario 2-mero, ramo laterali unico e margine interno 5-8-cellulifero, dentibus non-

nullis cellula fusca subglobosa v. appendice 3-5-mera gracili subpallida v. perithecio coronatis; perithecio erecto, recto v. subsigmoideo e clavato subfusoides subrufescente superne infusato lineola transversa ab ostiolo late conico separato.

Hab. in toto corpore *Apocelli parvipennis*, La Plata — Antherid. 50×10 (mas); perith. $80-125 \times 20-28$ (foem.).

2. *Dimorphomyces Trogophloeae* Speg., Lab. Arg. p. 519 fig. 61. — Ma. 3587

sculus ignotus. Foemineus parvus patentim bifidus, axi primario sterili minuto bicellulari obscure fumoso, secundariis vix fumosis appendicibus plurimis versiformibus ornatis; peritheciis subcylindraceis sursum infusatis linea transversa tenui strangulata ab ostiolo subconico crassissimo ferè truncato limitatis.

Hab. in abdomine *Trogophloeae tenuipuncti*, in ins. Santiago, La Plata, Argent. — Alt. tot. $95-110 \mu$; perith. $55-65 \times 18-20$.

3. *Dimorphomyces vulgatissimus* Speg., Lab. Arg. p. 520 fig. 63. — Ma. 3588

sculus parvus pallide rubescenti-fumosus, appendice 4-5 mera acuta, antheridio ovato longe tenuiterque attenuato-rostrato. Foemineus magnus plus minusve patentim bifidus, axi primario centrali 2-3 articulado fusco, ramis lateralibus adscendentibus v. patulo-reflexis, margine interno 7-15 cellulosis, ibique appendic. brevibus crassis fuscis v. elongatis filiformibus pallidis v. peritheciis nonnullis ornatis; peritheci. cylindraceo-obclavatis, rubescenti-fulgineis in parte crassiore supera praecipue, apice conoideo-attenuato, obtuse acutatis.

Hab. pervulgatus in toto corpore *Apocelli Argentinii*, A. Mendozani et A. opaci, Montevideo, San Luis et La Plata — Anther. $33-40 \times 12$ (mas), perith. $175-200 \times 22-25$ (foem.).

4. *Dimorphomyces argentinensis* Speg., Laboulb. Argent. in Anal. Mus. 3589

Nac. Buenos Aires, XXIII p. 187 (1912) fig. 14. — Totus melleus; receptaculis saepius plus minusve scorpioideis, masculis minoribus plerumque 2-4-antheridiferis, foemineis majoribus 2-12-peritheciigeris; peritheciis lanceolato-conoideis, $75-80 \times 15-20$, ostioliis attenuato-rotundatis.

Hab. in *Myrmedonia argentina?*, La Plata, Argentina — *D. Myrmedoniae* Thaxt. proximus.

5. *Dimorphomyces Meronevae* Thaxt., New or crt. Laboulb. f. Argent., 3590

Proc. Amer. Acad. 1912, p. 158. — Ind. masc.: recept. cum pede 40×23 ; appendix 17μ ; antherid. $32-35 \mu$, rostrum 15, venter 10μ , cellula ped. 9μ . — Perith. $65-70 \times 12-15$; sporidia (intra perith.) $14 \times 1-5$;

receptac. cum pede 18 μ ; recept. secundarium 18-35 μ ; append. primariae 18 \approx 9.

Hab. in artubus *Meronevae Sharpi*, Temperley Buenos Aires, La Plata Argent., socio *Monoicomycete nigrescenti* — Teste Speg., Lab. Arg. (1917), p. 517 n. 59 cum ic., *D. Meronevae* a *D. argentinensi* non differt.

6. *Dimorphomyces verticalis* Thaxt., Proc. Amer. Acad. 1912, p. 159, 3591 Speg. Lab. Arg. fig. 62.

Hab. in insecto *Athetasp.*, Palermo et Sta Catalina Argent. — Indiv. masc.: long. tot. cum pede 60 μ , antherid. cum cellula ped. 35 μ , rostrum 8, appendix 20-30 μ ; indiv. fem. perith. 75-100 \approx 15-20; appendices secundariae 25-30; long. total. ad apicem perith. altioris 100-200 μ , ad apicem recept. secund. 75-120.

RICKIA Cavares — Syll. XVI p. 689, XXII p. 7.

- 1 *Rickia argentinensis* Speg., Laboulb. Arg. p. 664 fig. 194. — Palli- 3592
dissime mellea, parva, simplex, cellulis receptaculi 5-6, basali brevi subcylindracea, caeteris tristichis dispositis, 2 dorsalibus 3 ventralibus etiam superpositis et 2 centralibus collateralibus basi dorsoque peritheci adnatis, perithecio apicali ovato ultra medium exerto et libero.

Hab. in dorso abdominis *Trogophloeii bilineati* in ins. Santiago La Plata — Perithecia 50-60 \approx 28-30; alt. tot. 75-100 \approx 30-35.

2. *Rickia formicicola* Speg., Laboulb. Arg. p. 665 fig. 195. — Parvula, 3593
subhyalina, receptaculo minimo, cellula basali subcylindracea brevi, cellulis receptacularibus, dorsalibus ternis dorso peritheci adnatis, suprema appendice setuliformi fusca apice capitata producta, ventralibus angustis tristichis, omnibus cellula altera appendice etiam setuliformi apice capitata praeditis, perithecio sublageniformi inaequilaterali ovato gross umbonato ostiolo obliquo obtuso subbilabiato donato.

Hab. in abdomine *Psenolepidis Silvestrii* in insula Santiago La Plata — Perith. 32-40 \approx 20-22; append. 40-70 μ ; alt. tot. 55-60 μ .

3. *Rickia perpusilla* Speg., Laboulb. Arg. p. 666 fig. 197. — Perpusilla, 3594
tota hyalina; cellula basali medioeri obconica; cellulis receptacularibus tristichis; serie infera dimera, articulo basali subelliptico connato, supero conico-mucroniformi libero; serie secunda v. intermedia etiam dimera, articulis connatis, apice in androsticho 7-8

mero appendiciformi elongato gracili, ejus cellulis duabus inferis majoribus quarum superiore 1-antheridifera; serie tertia 1-mera basi et dorso adnata, superne cellulis 2 collateralibus connatis subpedicelliformibus coronata; perithecio cellulis praecedentibus insidente, omnino libero, ellipsoideo recto obtuso minute ostiolato.

Hab. in elytris *Phalacri* sp.?, frequens Sta Catalina B. A. et La Plata. — Perith. $30-35 \times 13-14$; alt. tot. $60-70 \times 10-12$ (excl. append.).

4. *Rickia platensis* Speg., Laboulb. Arg. p. 667 fig. 198. — Parvula, 3595
hyalina; cellula basali subturbinata. mediocris; cellulis receptacularibus tristichis, serie dorsali extrema 10-15-mera, sursum libera caudiformi patentiuscula, perithecium plus minusve superante; serie intermedia 5-7-mera, praecedenti sequenti nec non perithecio adnata, articulis superis paraphysibus filiformibus brevibus nonnullis v. antheridio uno alterove praeditis; serie tertia intima seu ventrali 3-mera, cum perithecio ceterisque connata; perithecio ovato, recto v. inaequilaterali, superne sensim conico-attenuato, apice obtuso minute ostiolato.

Hab. in elytris *Europis* vicini, Sta Catalina B. A. Argent. — Perith. $40-50 \times 22-25$; alt. tot. $70-100 \times 32-35$.

5. *Rickia pumila* Speg., Laboulb. Arg. p. 668 fig. 199. — Pusilla, tota 3596
hyalina, cellula basali subturbinata pro ratione majuscula; cellulis receptacularibus tristichis, serie externa dorsali 10-12-mera, sursum libera caudiformi perithecium duplo superante, serie intermedia 4-6-mera praecedenti sequenti perithecioque adnata, articulis 1 v. 2 superis antheridio uno alterove praeditis, serie tertia intima seu ventrali 2-3 mera perithecio caeterisque confluyente; perithecio ovato superne subcoarctato obtuse breviterque conico-ostiolato.

Hab. in elytris *Orthopteri* cujusdam (*Sacium*?), Sta Catalina B. A., Argentina — Perithecia $22-25 \times 13-15$; alt. tot. $75-85 \mu$.

6. *Rickia rhacomycoides* Speg., Lab. Arg. p. 669 fig. 200. — Submaju- 3597
scula, receptaculo obconoideo, cellulis omnibus arcte adnatis obscure tetrastichis, centro fumoso, margine atro squamoso, perithecio magno elliptico-conico acuto, ostiolo vix manifesto.

Hab. in elytris *Scydmaenidei* cujusdam in ins. Santiago, La Plata, Argent. — Perithecia $80-90 \times 38-42$; receptaculum $90-110 \times 38-45$.

7. *Rickia Coprighis* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3598
Buenos Aires, XXVI (1916) p. 507 fig. 47. — Parvula, $75-100 \times$

25-35, hyalina; stipite unicellulari subcylindraceo, 20-30 \times 10, apice cellulas binas sustinente, cellula ventrali cellula altera coronata superne in perithecio ovoideo 30-35 \times 12-15 producta, e latere antheridio ornata; cellula autem dorsali seriebus duabus heptameris cellularum superpositarum aucta, series interna 50 μ , externa 60 μ longa, series externa inter dentes seu sinus antheridios abortivos, basi nigro-annulatos praebente.

Hab. in *Coprighis cultratello* (ex *Acaridis*) in ins. Java (A. BERLESE). — *R. minatae* Paoli certe affinis, sed habitat et loco, nec non notis peculiaribus nonnullis distincta.

8. *Rickia Jacobsoni* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3599 Buenos Aires XXVI (1915) p. 508 fig. 48. — Majuscula, 175-200 μ alta, sat regularis, tota hyalina; cellula basali cylindracea 50-75 \times 10-15; cellulis in receptaculo tristichis, serie prima 4-mera perithecium ovatum 65-80 \times 30-40 fulcente, secunda interna dorso perithecii adnata 11-12-mera, tertia vel dorsali externa etiam 11-12-mera, latere altero serie centrali adnata, altero dense tristiche antheridifera, ambabus apice in cornu crasso brevi 4-5-cellulari obtuso confluentibus; antheridiis numerosissimis, psallio nigro pusillo ornatis.

Hab. in *Megalolaepas Nederweni* in ins. Java (leg. JACOBSON, comm. A. BERLESE) — Statura majuscula, cornu apicali, etc. bene distincta.

9. *Rickia Silvestrii* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3600 Buenos Aires XXVI (1915) p. 509 fig. 49. — Pusilla, 75-80 μ alta, tota hyalina; cellula basali cylindracea, sursum dilatata, 20 μ alta; cellulis receptaculi distichis, serie altera bicellulari perithecium ovatum 40-45 \times 20-22 fulcente, altera 6-7-mera, dorso perithecii adnata et brevior, margine externo paraphysibus bacillaribus 5-6, erectiusculis, 40-50 \times 3, basi psallio minuto nigro ornatis donata.

Hab. in *Hypoaspide Spegazzinii* Berl., Mayabal, Erythraea (F. SILVESTR). — Ad genus *Distichomyces* transit.

10. *Rickia Peyrerimhoffi* Maire, Bull. Scient. Fr. et Belg., t. 49., 1916, 3601 p. 290, cum icon., et III. Contrib. étude Laboulb. Afrique du Nord, Alger. 1920, p. 9. — Majuscula subregularis, cellula basali hyalina excepta mellea, cellulis in receptaculo tristichis, basalibus brunneo-suffusis, serie anteriore 20-23-mera, perithecio 8-10 cellulis adnata, serie posteriore 19-20-mera in appendicem primariam supra medium perithecorum desinente, utraque extus appendici-et antheridifera; serie centrali 16-18-mera cellulis 8-9 dorso perithecii ad-

nata, supra appendicem primariam ad quartum superiorem peritheci desinente. Appendicibus cum antheridiis in parvos greges (2-3) congregatis, basi psallio nigro hypocrateriformi instructis; appendicibus subhyalinis complanatis, hospiti adpressis, linearibus v. spathulatis, antheridiis subaequilongis; antheridiis lageniformibus plerumque curvulis, rostro brunneo suffuso, ventre ex hyalino brunneolo, simplicibus. Perithecio ellipsoideo-oblongo, apice brunneo-suffuso et maculis atris 2 notato, non constricto, ostiolo subhyalino. Ascosporis inter $\frac{1}{4}$ et $\frac{1}{3}$ inferiorem septatis, hyalinis, laevibus, mucro obvolutis.

Hab. in prothorace *Scaphosomatis agaricini* L. et flavonotati Pic, prope Kolea et C. Bône, in Algeria et Mauritania, Africa bor.

11. *Rickia Lispini* Thaxt., Proc. Amer. Acad. 1912 p. 160, Speg. Lab. 3602 Arg. fig. 196.

Hab. in abdomine etc. *Lispini tenelli*, Sta Catalina, Buenos Aires, La Plata (SPEG.), Llavallol Argent. nec non Los Amates Guatemala. — Sporidia 28×4 ; perithec. $40-50 \times 27-31$; receptac. $60-75 \times 28-35$; appendices $20-55 \mu$; long. tot. $75-120$.

12. *Rickia Melanophthalmae* Thaxt., Proc. Amer. Acad. 1912, p. 161. 3603

Hab. in elytris minutae spec. *Melanophthalmae*, Llavallol Argent. — Perith. $35-43 \times 23$; sporidia $40 \times 2,5$; recept. $40 \times 27-31$; longit. tot. $75-85 \mu$.

13. *Rickia furcata* Thaxt., Proc. Amer. Acad. 1912 p. 366. — *Furcata* 3604 v. irregulariter ramosa; appendicibus subcylindricis $8-16 \times 2,5$; perithecio $30-40 \times 8-10$, incluso apiculo ($2,5-3$ longo); sporis $25 \times 2,5$; longitudo tot. usque ad apicem peritheci $40-70 \mu$, ad apicem rami posterioris $50-175 \mu$.

Hab. in insecto *Euzerconis* sp., Trinidad, Manaos Amos. Granada W. J.

14. *Rickia arachnoidea* Thaxt., Proc. Amer. Acad. 1912 p. 367. — Receptaculo sursum in ramulos saepius furcados, arachnoideos diviso; appendicibus brunneolis, $7-18 \times 4$; peritheciis $70 \times 18-20$; sporis 30×3 ; ramis $8-10 \mu$ cr., longioribus usque ad $460-520 \mu$ long., cellula basilari et subjuncta appendicis primariae $18-20 \times 4$. 3605

Hab. in insecto *Discopomae* sp., *Euzerconis* sp., *Trachyropodae*, Trinidad.

15. *Rickia Discopomae* Thaxt., Proc. Amer. Acad. 1912 p. 369. — *Hyalina* demum brunneola; peritheciis $48-52 \times 18-25$; sporis 30×5 ; appendicibus $7-10 \times 3-4$; longitudo totalis $250-350 \times 18-32$ (e basi 3606

perithecii).

Hab. in superficie sup. *Discopomae* sp., Peradeniya, Ceylon.

16. *Rickia elegans* Thaxt., Proc. Amer. Acad. 1912, p. 370. — Recta 3607
v. curvula, basim versus sensim angustata; perithecio 65-85 \times 20;
appendicibus 15 \times 4; longitudo totalis 200-220 \times 35-40.

Hab. in artubus et corporis margine *Discopomae* sp., Peradeniya, Ceylon.

17. *Rickia pulchra* Thaxt., Proc. Amer. Acad. 1912, p. 371. — Cellula 3608
basilari varie evoluta, breviuscula, 18-50 \times 6-15; appendicibus 35-60
 \times 4-6; peritheciis 35-40 \times 15; sporis 22 \times 3,5; longitudo totalis, ex-
cluso pedicello, 48-56 \times 35-38.

Hab. in superficie inferiore et artubus *Macrocheles* et *Celaenopsis*, Kamerun Africae.

18. *Rickia obcordata* Thaxt., Proc. Amer. Acad. 1912, p. 372. — Hy- 3609
lina; cellula basilari, incluso pede, 28-35 \times 15-18; perithecio 60
 \times 25; appendicibus 24-35 \times 5; antheridiis emergentibus 12 μ ; cor-
pore subobcordato 90-100 \times 78-85.

Hab. in *Insecto* ejusd. minuto (ex Coleopt.), Kamerun Africae.

19. *Rickia elliptica* Thaxt., Proc. Amer. Acad. 1912, p. 373. — Hy- 3610
lina ambitu subelliptica; cellula basilari, incluso pede, 8-16 μ longa;
perithecio 30-40 \times 10-12, exclusa processu (7 \times 2); sporis 22 \times 2,5;
corporis long. totalis 50-66 \times 35-40.

Hab. in artubus *Discopomae* sp., Trinidad.

20. *Rickia inclinata* Thaxt., Proc. Amer. Acad. 1912, p. 374 — Mi- 3611
nuta hyalina irregulariter rotundata; cellula basilari 25 \times 8 (incluso
pede); perithecio 38-40 \times 11; sporis 25 \times 3; appendicibus hyalinis,
leviter tenuatis, 16 \times 3, septo basali manifestissimo; long. tot. cor-
poris ad apicem perithecii 50 \times 41-44.

Hab. in *Insecto* ejusd. minuto indet. (ex Coleopt.), Trinidad.

21. *Rickia Celaenopsis* Thaxt., Proc. Amer. Acad. 1912, p. 375. — 3612
Hyalina, minuta, ambitu subangulosa; cellula basilari 25 \times 8, in-
cluso pede; perithecio 40 \times 20; sporis 20 \times 3; antheridio 12 μ longo;
longitudo tot. ad apicem perithecii 50 \times 38.

Hab. in artubus *Celaenopsis* sp., Trinidad.

22. *Rickia discreta* Thaxt., Proc. Amer. Acad. 1912, p. 375. — Hy- 3613
lina, elongata; appendicibus flavidis, subcylindricis, annulo basilari
nigro conspicuo, 15-25 \times 3,5; primaria 30-45, cellulis basilaribus
binis 10 \times 4; peritheciis 25 \times 9; cellula basilari 20 \times 7, incluso pede;
totali longit., ad apicem perithecii 55-65 \times 18-22.

Hab. in *Gamaside*, Trinidad.

23. *Rickia spathulata* Thaxt., Proc. Amer. Acad. 1912, p. 376. — Am- 3613
bitu (excepto vertice peritheci) spathulata; perithecio $40-46 \times 16-20$;
cellula basilari, incluso pede, $28-33 \times 9-11$; sporis 28×3 ; appen-
dicibus 6×2 , fumoso-brunneis, facile deciduis; longit. total., excl.
appendice primaria, $12-16 \times 6-8$. bis

Hab. in artubus *Celaenopsis*, Amazonia.

24. *Rickia excavata* Thaxt., Proc. Amer. Acad. 1912, p. 377. — Sub- 3614
triangularis; subconcaua; sporis 18×3 ; perithecio 30×10 ; appen-
dicibus subcylindraceis, minutis, $6 \times 2,5$; cellula basilari 20×6 ;
longit. total. ad verticem peritheci 75×34 , exclusa cellula basi-
lari appendicis primariæ.

Hab. in Insecto *Celaenopsis*, Trinidad.

25. *Rickia euzerconalis* Thaxt., Proc. Amer. Acad. 1912, p. 378. — 3615
Breviter spathulata hyalina perithecio angusto erecto vertice extus
libero, $22-24 \times 8$; sporis $25 \times 2,5$; appendicibus obtusis, flavido-brun-
neis $7 \times 3,5$; sporis $25 \times 2,5$; cellula basilari $14-16 \times 6-8$; longit.
total. ad verticem peritheci $50-70 \times 24-32$; cellulis binis appendi-
cis primariæ $12-15 \times 5$.

Hab. in Insecto, *Euzerconis* sp., Kamerun Africae.

26. *Rickia Megisthoni* Thaxt., Proc. Amer. Acad. 1912, p. 379. — Hya- 3616
lina; appendicibus brevissimis, minutis $5 \times 2,5$; sporis 20×2 ; pe-
ritheciis $30-32 \times 8-11$; cellula basilari 16×7 , incluso pede; longit.
tot. ad verticem peritheci $50-60 \times 20$.

Hab. in Insecto *Megisthani* sp., Trinidad.

27. *Rickia kamerunana* Thaxt., Proc. Amer. Acad. 1912, p. 380 — Hya- 3617
lina, asymmetrica; appendicibus brevibus, obtusis, 10×3 ; sporis
 $18-20 \times 2$; perithecio; $30-34 \times 6-8$; cellula basilari, excluso pede.
 8μ longa; cellulis binis basilaribus appendicis primariæ 8μ ; long-
git. total. ad verticem peritheci 40×20 .

Hab. in Insecto *Euzerconis* sp., Kamerun, Africae.

28. *Rickia filifera* Thaxt., Proc. Amer. Acad. 1912, p. 381. — Minuta, 3618
gracilis; appendicibus gracilibus, cylindraceis, hyalinis, 10×2 ;
sporibus $24 \times 2,5$; peritheciis $35-45 \times 8-12$; cellula basilari, incluso
pede, $12 \times 4,5$; long. tot. ad verticem peritheci $35-45 \times 8-12$; fla-
gello libero longiore 175μ longo.

Hab. in Coleoptero majusculo, *Magistkano* affini, Passali,
Kamerun Africae.

29. *Rickia rostrata* Thaxt., Proc. Amer. Acad. 1915, p. 10. 3619

Hab. in elytra dextera *Tanygnathi ruficollis*, Java
et Saraw Borneo. — Sporidia $20 \times 7,5$; venter peritheci, excl. cell.

- margin. axis 42-48 \times 25-28; process. rostr. 63-72 \times 10-12; appendix secund. 24 \times 3,5; longit. tot. ad apicem perith. 240-450 \times 20-35.
30. *Rickia Tomari* Thaxt., Proc. Amer. Acad. 1915 p. 11. 3620
Hab. in elytris *Tomari* sp., Peradeniya Ceylon. — Perith. 80-90 \times 22-24; antheridia 10 \times 3,5; long. tot. ad apicem perith. 135-150 \times 30-36
31. *Rickia marginata* Thaxt., Proc. Amer. Acad. 1915 p. 12. 3621
Hab. in corpore *Heterophagae punctulatae*, Peradeniya Ceylon. — Peritheec. 75-80 \times 35-38; sporidia 46 \times 4,5; recept. 150-625 \times 46-85; appendix later. 30-80 \times 5; terminalis 300 \times 8.
32. *Rickia coptengalis* Thaxt., Proc. Amer. Acad. 1915 p. 13. 3622
Hab. in *Coptengi Shepardi* in insula Djilolo Indo-Malayae. — Perith. 100-112 \times 28-30; long. tot. ad apicem perith. 450-500 μ , latit. 40 μ ; antheridia 12 μ ; appendix 8 μ .
33. *Rickia Onthofagi* Thaxt., Proc. Amer. Acad. 1915 p. 15. 3623
Hab. in abdomine *Onthofagi* sp. Peradeniya Ceylon. — Peritheec. 65-100 \times 28-35; sporid. 50 \times 7 (intra perith.); antheridia 15 \times 5; appendices 4 \times 3,5; longit. total. ad apicem perith. 260-340 \times 40-44.
34. *Rickia compressa* Thaxt., Proc. Amer. Acad. 1915 p. 16. 3624
Hab. in antennis et prothorace *Leptochiri* sp. v. aff., Java (BONYER). — Perith. 60-75 \times 20-22; recept. ad apicem appendicis primariae 140-155 μ ; appendix secundaria 20-40 \times 4-5; longit. tot. ad apicem perithecii 175-200 \times 32-35.
35. *Rickia Uropodae* Thaxt., Proc. Amer. Acad. 1915, p. 17. 3625
Hab. in corpore *Uropodae* sp., Large Passali, Ins. Java (THOMPSON). — Perith. 60 \times 18; pars basilaris appendicis prim. 16 \times 8, appendices secundariae 18 \times 9; longit. total. 100-120 \times 30.
36. *Rickia uncinata* Thaxt., Proc. Amer. Acad. 1915, p. 18. 3626
Hab. in artubus *Macrochelis* sp., (Large Passali) Java (THOMPSON). — Perith. 38-42 \times 12-16; appendix primaria, inclusa basi, 24 μ ; appendix secundaria 12 \times 4; long. tot. 150-500 \times 10.
37. *Rickia nutans* Thaxt., Proc. Amer. Acad. 1915 p. 19. 3627
Hab. in apice abdominis *Macrochelis*, (Large Passali) Peradeniya Ceylon. — Perithecia 58-66 \times 20; appendix apicalis 15-16 μ ; longit. tot. 750, diam. circ. 12.
38. *Rickia passalina* Thaxt., Proc. Amer. Acad. 1916, p. 17. 3628
Hab. in insectis *Passalo cornuto* aliisque spec., Kentucky, Para et Manaos Bras., Grande Etang Grenada, Dominica, Nicaragua, Guatemala. — Sporidia 20 \times 2,5; perith. 40 \times 10, long. tot.

axeos 150-900 \times 8-12; appendices 9-12 \times 2,5.

39. *Rickia apiculifera* Thaxt., Proc. Amer. Acad. 1915, p. 18. 3629

Hab. in Passalo tlascale et Neleida Antillarum, Grand Etang Grenada, Guatemala, Jucatan, Nicaragua. — Sporidia 25-28 \times 3-4; perith. 30-50 \times 10-16; long. tot. maxime varia 100-1000 \times 10-20; appendices 18-20 \times 3,5.

40. *Rickia bifida* Thaxt., Proc. Amer. Acad. 1916, p. 19. 3630

Hab. in insect. variis ex Passalineis, Guatemala, Nicaragua, Rio de Janeiro, Amazonia. — Sporidia, 28 \times 2,5; peritheci. 35-40 \times 10, cellulae margin., 3,5 μ , pes 9 \times 6-7; receptaculi pes 7-12 \times 7-12; divisiones longiores 75-100 \times 5,5-7; pars libera appendicis primariae 12-16 \times 3,5-4; appendices 15-20 \times 3.

41. *Rickia dichotoma* Thaxt., Proc. Amer. Acad. 1916, p. 20. 3631

Hab. in superf. super. Euzerconis speciei parasiticae in insectis Passalineis, Hayti. — Sporidia 30 \times 3,5; perith. 55-65 \times 14-18, cellulae marg. 7 μ ; receptaculi pars basilari 45 \times 30 \times 12, eius divisiones longiores 250-675 μ .

42. *Rickia Cornuti* Thaxt., Proc. Amer. Acad. 1916, p. 21. 3632

Hab. in Passalo cornuto, Kentucky (HYATT). — Sporidia 36 \times 4; perith. 60-75 \times 14-18, cellulae marg. 10 μ ; recept. pars basilari 18-27 \times 25, ejus divisiones longiores 625 \times 12; appendices 16-18 \times 2,5-3,5, basis appendicis primariae 16-18 \times 4,5 (in apice 1,8 μ).

43. *Rickia depauperata* Thaxt., Proc. Amer. Acad. 1916, p. 22. 3633

Hab. in Celaenopsis sp., Hayti (MANN). — Sporidia 18 \times 2; perithecia 20-28 \times 7-9; long. tot. ad apicem perithecii 35-40 \times 19-23; appendices longiores 7 \times 3,5.

44. *Rickia dominicensis* Thaxt., Proc. Amer. Acad. 1916, p. 23. 3634

Hab. in antennis Passali speciei majusculae, Dominica — Sporidia 20 \times 2; perith. 36 \times 6; pars opaca baseos 26 \times 3,5; long. tot. ad apicem perithecii 50 μ , ad apicem flagelli 160-190; maxima latitudo 15 μ ; appendices 15-25 \times 3.

45. *Rickia parvula* Thaxt., Proc. Amer. Acad. 1916, p. 25. 3635

Hab. in Celaenopsis sp., St. Anns Valley Port of Spain Trinidad. — Sporidia 16 \times 2; perith. 28 \times 9; long. tot. ad apicem perithecii 40 \times 18; basis primariae appendicis 10 \times 3,5.

46. *Rickia radiata* Thaxt., Proc. Amer. Acad. 1916, p. 25. 3636

Hab. in Celaenopsis sp., Kamerun. — Sporidia 22 \times 2,5; perithecia 28 \times 11, antheridia 6-7; μ appendices longiores 24 \times 3,4; basis append. primariae 10-12 \times 3; processus ad cell. basil. 30-55; cell. basil. receptaculi 10-15 \times 5,5; long. tot. ad apicem perithecii

45-55 \approx 23-28.

47. *Rickia Hypoaspidis* Thaxt., Proc. Amer. Acad. 1916, p. 27. 3637
Hab. in insectis *Hypoaspidis* sp., Grand Etang Grenada. — Sporidia 18 \approx 2,5; perith. 35 \approx 12, cell. marg. 3 μ ; appendices 10-12 \approx 3-4; cellula. basil. 10-12 \approx 4,5-5; long. tot. ad apicem peritheci 55-65 \approx 16-25.
48. *Rickia Euxesti* Thaxt., Proc. Amer. Acad. 1916, p. 27. 3638
Hab. in insecto *Euxesto Parki*, Manila Ins. Philipp. — Sporidia 18-20 \approx 2,5; perith. 26-36 \approx 16-18; antheridia 18 \approx 3,5; long. tot. ad apicem perith. 50-90 \approx 20-26, in parvis exempl. 30 \approx 15.
49. *Rickia Europsis* Thaxt., Proc. Amer. Acad. 1916, p. 28. 3639
Hab. in insecto *Europsis* sp., Kamerun. — Sporidia 24 \approx 3; perith. 40-54 \approx 16-18; appendices 6-9 \approx 4; antheridia 7 \approx 3,5; long. tot. ad apicem perith. 60-66 \approx 36-43.
50. *Rickia gracilis* Thaxt., Proc. Amer. Acad. 1916, p. 29. 3640
Hab. in insecto *Stenotarso guineensi*, Kamerun. — Sporidia 35 \approx 3,6; perith. 75 \approx 29; antherid. 14 \approx 4; appendices 10-20 \approx 3; long. tot. ad apicem perith. 450 \approx 34; recept. 26 μ .
51. *Rickia danaëalis* Thaxt., Proc. Amer. Acad. 1916, p. 30. 3641
Hab. in variis partibus *Danaë senigalensis*, Kamerun. — Sporidia 36 \approx 3,6; perith. 75-95 \approx 28-32; antherid. 16 \approx 5,5; appendices, inf. 20 μ , super. 65 \approx 7; appendix primaria 75 μ , basis 18 \approx 10; long. tot. ad apicem perith. 120-190 \approx 45-60.
52. *Rickia Seydmaeni* Thaxt., Proc. Amer. Acad. 1916, p. 31. 3642
Hab. in superf. infer. *Seydmaeni bicoloris*, Kittery Point, Maine Amer. bor. — Sporidia 30 \approx 3; perith. 18 \approx 4; appendices 18-22 \approx 5,5, antherid. 18 \approx 4; long. tot. ad apicem peritheci 150-160 \approx 35-38.
53. *Rickia Stenotarsi* Thaxt., Proc. Amer. Acad. 1916, p. 32. 3643
Hab. in elytris *Stenotarsi guineensis*, Kamerun Afr. occid. — Sporidia 40 \approx 4; perith. 80-120 \approx 28-35; antheridia 22 \approx 4; appendices 22-46 \approx 4; long. tot. ad apicem peritheci 200-350 \approx 40-55.
54. *Rickia latior* Thaxt., Proc. Amer. Acad. 1916, p. 33. 3644
Hab. in elytris *Stenotarsi guineensis*, Kamerun. — Sporidia 38 \approx 3,8; perith. 80-90 \approx 27-30; antherid. 9 \approx 3,6; appendices 18-60 \approx 3,6; long. tot. ad apicem peritheci 48-70 μ .
55. *Rickia introversa* Thaxt., Proc. Amer. Acad. 1916, p. 34. 3645
Hab. in super. abdominis *Copropori lati*, Mindanao Ins. Philipp. — Sporidia 18 \approx 2; perith. 35-40 \approx 11-13; appendices 6 \approx 1,5; antheridia 12 \approx 2.

56. *Rickia nigroflimbriata* Thaxt., Proc. Amer. Acad. 1916, p. 35. 3646
Hab. in apice abdominis *Copropori lati*, Mindanao Ins. Philipp. — Perith. $38 \approx 10$; appendices $6 \approx 2,5$; long. tot. $80 \approx 24$.
57. *Rickia inclusa* Thaxt., Proc. Amer. Acad. 1916, p. 36. 3647
Hab. in artubus *Copropori lati*, Mindanao Ins. Philipp. — Sporidia copiosa, $28 \approx 2,5$; perith. $77 \approx 27$; long. tot. ad apicem peritheci $140 \approx 50$.
58. *Rickia circumdata* Thaxt., Proc. Amer. Acad. 1916, p. 37. 3648
Hab. in insecto *Episcaphula piciventri*, et *Episcaphula* sp., Kamerun. — Sporidia $28 \approx 3$; perith. $54-64 \approx 20$; appendices $12 \approx 3$; antheridia $10 \approx 3,5$; long. tot. ad apicem peritheci $130-175 \approx 50-55$.
59. *Rickia papuana* Thaxt., Proc. Amer. Ac. 1916, p. 38. 3649
Hab. in insecto *Calopsis* sp., Nova Guinea Britannica. — Perithecia $75 \approx 24$; antheridia $12 \approx 4$; appendices $20 \approx 4$; long. tota. ad apicem peritheci $235 \approx 90$.
60. *Rickia pallida* Thaxt., Proc. Amer. Acad. 1916, p. 39. 3650
Hab. in insecto *Amblyscelis* sp., Kamerun. — Sporidia $42 \approx 4$; perith. $15-22 \approx 5-6$; long. tot. ad apicem perith. $200-275 \approx 60-85$.
61. *Rickia Ancylopi* Thaxt., Proc. Amer. Acad. 1916, p. 40. 3651
Hab. in elytris *Ancylopi bisignati*, Kamerun — Sporidia $28 \approx 3$; perith. $60-66 \approx 12-18$; appendices $54 \approx 3,6$; antheridia $11 \approx 4$; long. tot. ad apicem peritheci $145-160 \approx 32-36$.
62. *Rickia Episcaphæ* Thaxt., Proc. Amer. Acad. 1916, p. 41. 3652
Hab. in insecto *Episcapha antennata*, Mindanao Ins. Philipp. — Sporidia $50 \approx 5$; perith. $80-100 \approx 27-30$; antheridia $16 \approx 4$; appendices $10-20 \approx 2$; longit. totalis ad apicem peritheci $310-425$.
63. *Rickia Eumorphi* Thaxt., Proc. Amer. Acad. 1916, p. 42. 3653
Hab. in insecto *Eumorpho cyanescenti*, Mindanao Ins. Philipp. — Sporidia $40 \approx 3,6$; perith. $90-100 \approx 20-24$; antheridia $20 \approx 4$; appendices $80-90 \approx 4$; long. tot. ad apicem peritheci $230-400 \approx 40-55$.
64. *Rickia nigrescens* Thaxt., Proc. Amer. Acad. 1916, p. 44. 3654
Hab. in elytris *Copropori hypocyploidis*, Sarawak, Borneo, Manila Ins. Philipp. — Sporidia $35 \approx 2,5$; antheridia $42 \approx 4$; long. total. ad apicem peritheci $150-190 \approx 32-35$.
65. *Rickia pallescens* Thaxt., Proc. Amer. Acad. 1916, p. 45. 3655
Hab. in artubus *Copropori parvæ speciei*, Manila, Ins. Phi-

- lipp. — Sporidia $30 \times 2,8$; perithecia 68-75 \times 18-22; antheridia 15 \times 4; long. tot. ad apicem perithecii 150-200 \times 35-45.
66. *Rickia Circopis* Thaxt., Proc. Amer. Acad. 1916, p. 45. 3656
Hab. in thorace inf. *Circopis philippinensis*, Kamerun. — Perith. 60-80 \times 20-24; appendices 3,5 5,5 \times 3,5; antheridia 12 \times 3,5; longit. tot. ad apicem perithecii 135-155 \times 40-45.
67. *Rickia Episcaphulae* Thaxt., Proc. Amer. Acad. 1916, p. 46. 3657
Hab. in insecto *Episcaphula* sp., Kamerun. — Perith. 50 \times 12-14; appendices 10 \times 4; antheridia 12-16 \times 4-5; long. tot. ad apicem perithecii 160-180 \times 36-40.
68. *Rickia Saulae* Thaxt., Proc. Amer. Acad. 1916, p. 47. 3658
Hab. in insecto *Saula* sp., Mindanao Ins. Philipp. — Sporidia 28 \times 3; perithecia 60-65 \times 25-28; long. tot. ad apicem perithecii 150 μ ; antheridia 16 \times 4.
69. *Rickia Phalacri* Thaxt., Proc. Amer. Acad. 1916, p. 48. 3659
Hab. in elytris *Phalacri* sp., Manila Ins. Philipp. — Sporidia 28 \times 2,5; perith. 58-65 \times 16-18; appendices 9-11 \times 3,5; long. tot. ad apicem perithecii 135-175 \times 18-20.
70. *Rickia sarawakensis* Thaxt., Proc. Amer. Acad. 1916, p. 49. 3660
Hab. in elytris *Phalacri* (?) sp., Sarawak Borneo. — Sporidia 28 \times 2,8; perith. 45 \times 19; appendices 10 \times 4; antheridia 10 \times 3,5; long. totalis ad apicem perithecii 95 \times 10 12.
71. *Rickia Parasiti* Thaxt., Proc. Amer. Acad. 1916, p. 49. 3661
Hab. in insecto *Parasito* sp., Mexico (MANN). — Sporidia 25 \times 2,5; perithecia 45-60 \times 18-20; appendices 9-11 \times 3; cellulae basillares 35 \times 9; long. tot. ad apicem perithecii 90-125 \times 26-36.
72. *Rickia Gryllotalpae* Thaxt., Proc. Amer. Acad. 1916, p. 50. 3662
Hab. in alis *Gryllotalpae* sp., in Africa (MEARS). — Sporidia 35 \times 3; perithecia 75-85 \times 24-27; antheridia 15 μ ; appendices 12-20 \times 7,5; long. tot. ad apicem perithecii 230-325 \times 28.
73. *Rickia Lycopodinae* Thaxt., Proc. Amer. Acad. 1916, p. 51. 3663
Hab. in artubus *Lycopodinae* sp., Madagascar (WALSIN). — Perithecia 55 \times 24-27; pars libera antheridii 15-20 μ ; appendice 7-10 \times 5,5; long. tot. ad apicem perithecii 126-156 \times 40 45.
74. *Rickia Zirophori* Thaxt., Proc. Amer. Acad. 1916, p. 52. 3664
Hab. in artubus et superf. infer. *Zirophori* sp., Port Spain et Ariona Trinidad. — Sporidia 35 \times 3,5; perithecia 116 \times 27; appendices 40 \times 4; long. tot. ad apicem perithecii 300-400 \times 34-40.
75. *Rickia flagellifera* Thaxt., Proc. Amer. Acad. 1917, p. 652. 3665
Hab. in insecto *Leptaulax dentatus*, Mindanao, Ins. Phi-

lipp. — Sporidia 20×2 ; perith. $30-36 \times 12-14$; recept. ad basim flagell. $35-55 \times 18-20$; long. tot. ad apicem peritheci $55-80$; flagellum longius 225×5 .

76. *Rickia pinnata* Thaxt., Proc. Amer. Acad. 1917, p. 652.

3666

Hab. in insecto *Leptaulax dentatus*, Mindanao, Ins. Philipp. — Sporidia 45×5 ; perith. $65-75 \times 23-27$; long. tot. ad apicem peritheci $500 \times 20-28$.

NYCTEROMYCES Thaxt., Proc. Amer. Acad. 1917, p. 653. — Ind. masc. e serie singula superpositarum cellularum constans; pes et cellula basilaris bene evoluta; cellulae minutae numero indefinito, gerentes antheridia composita et duas cellulas superpositas terminales, quarum superior particulariter conformata. Ind. femin. e cellula basilari bene evoluta et minuta cellula subbasilari constans; hac postrema appendicis e cellula pedunc. et altera terminali peculiari formatam gerens. Peritheci pes et cellulae basilares seriis non discretas, partem ascophoram limitantes. — Sporidia hyalodidyma, cellula ascogena singula.

1. *Nycteromyces streblidinus* Thaxt., l. c. p. 654.

3667

Hab. in abdomine super. et artubus. *Streblae vespertilionis*, in *Vespertilionibus*, Venezuela (CARRIKER). — Sporidia $42-45 \times 4$; perith. cum pede $210-280 \times 36-45$, apex $35-40 \mu$; cellula basil. $70-90 \times 21$, subbasilar. 10×18 ; appendix 18×14 ; cellula pedunc. 4×16 ; long. total. ad apicem peritheci $290-360 \mu$.

DIANDROMYCES R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 208. —

Axis receptaculi coincidens cum appendicibus, et ex cellulis superpositis efformatus; tres inferiores receptaculum proprium efformantes; cellula subbasalis duo antheridia symmetrice disposita efformans et duo perithecia gerens; appendices pluricellulares, quarum cellulae inferiores ramos efformant; antheridia e cellula pedicellari et basilari formata, cellulas antheridiales $4-5$ gerentes. — Affinis gen. *Dichomyces*, *Monoicomycetes*, *Dimeromyces*.

1. *Diandromyces chilensis* R. Thaxter, l. c. — Flavo-brunneus Longitudo ad apicem peritheci $150-190 \mu$, perithecium supra cellula pedicellari $90-105 \times 30-40$; antheridia supra cellula pedicellari 35μ ; receptaculum circa 70μ ; sporae circ. 35×3 ; appendices 225μ long.

3668

Hab. in *Leptoglossa sculpticollis*, Corral, Chile America merid.

TETTIGOMYCES Thaxt., Proc. Am. Acad. 1915 p. 20. — Receptaculum ex indefinita serie cellularum superpositarum compositum, cellulæ 1-seriatae v. apicali longitrorsum partito; pes majusculus, niger arrhizus; appendix discreta v. mera receptaculi continuatio. Perithecia subindeterminata solitaria v. plura; cellulæ parietales 1-pluristratosae; trichogynum ramosum plus minus in basi perithecii persistens; asci 8-spori; sporidia 1-septata cellulæ ascogenae 3-plures.

- 1 **Tettigomyces Gryllotalpae** Thaxt., Proc. Am. Acad. 1915, p. 2. 3669
Hab. in superficie inf. abdominis et in processibus analibus *Gryllotalpae africanae*, Samarang Java. — Perith. 135-310 \times 85-62; sporidia 45-50 \times 4,5; appendix 40-60 \times 25-40; receptaculum 550-1400 \times 25-65; longit. total. ad apicem perithecii 235-1560.
2. **Tettigomyces plerophilus** Thaxt., Proc. Amer. Acad. 1915, p. 23. 3670
Hab. in apice alae *Gryllotalpae africanae*, Samarang Java. — Perith. 125-190 \times 25-50; sporidia 45 \times 2,5; long. tot. ad apicem appendicis 400-1000 \times 20-30.
3. **Tettigomyces indicus** Thaxt., Proc. Am. Acad. 1915, p. 24. 3671
Hab. in corpore *Gryllotalpae* sp., in India boreali (SCUD. DER). — Perithecia. 120 \times 44; recept. 100-230 \times 20-28; appendix 200-400.
4. **Tettigomyces chaetophilus** Thaxt., Proc. Amer. Acad. 1915, p. 25. 3672
Hab. in antennis abdominalibus *Gryllotalpae africanae*, Samarang Java. — Perith. 100-120 \times 28-35; recept. 40-75 \times 30-40; appendix 50-100 μ ; longit. tot. ad apicem perithecii 150-200, incluso pede 40 μ .
5. **Tettigomyces galeatus** Thaxt., Proc. Amer. Acad. 1915, p. 26. 3673
Hab. in superf. inf. abdominis *Gryllotalpae africanae*, Samarang, Java. — Perith. 190-225 \times 55-75; recept. 100-140 \times 60-80; long. totalis ad apicem perithecii 250-400 μ .
6. **Tettigomyces confusus** Thaxt., Proc. Amer. Acad. 1915, p. 26. 3674
Hab. in antennis abdominalibus *Gryllotalpae africanae*, Samarang Java. — Perith. 120-200 \times 40-60; appendix 40 μ , ramuli ejus 100 \times 20; recept. 80-175 \times 32-50; longit. total. ad apicem perithecii 230-390 μ .
7. **Tettigomyces brevis** Thaxt., Proc. Amer. Acad. 1915, p. 27. 3675
Hab. in margine inf. abdominis *Gryllotalpae africanae*, Samarang Java. — Sporidia 50 \times 3; perith. 200-450 \times 40-60; appendix 40-60, ramuli 120-150; receptac. 25-75 \times 40-60; long. tot. 230-550 μ .

8. *Tettigomyces acuminatus* Thaxt., Proc. Amer. Acad. 1915, p. 28. 3676

Hab. in margine dext. infer. abdominis *Gryllotalpæ africanæ*, Samarang Java. — Perith. 150-200 \approx 40-60; sporidia (intra perith.) 40-45 \approx 3,5; recept. 80-40; long. tot. ad apicem peritheci 250-310 μ .

DICHOMYCES Thaxt. Syll. XI p. 447, XIV p. 727, XVI p. 677.

1. *Dichomyces argentinensis* Spèg., Laboulben. Argent. in Anal. Mus. 3677

Nac. Buenos Aires, XXIII p. 283 (1912) fig. 9. — Totus subhyalinus; 250-350 μ altus, cellulis extimis secundi ordinis nigris saepeque paraphysibus etiam fuscis exceptis; peritheciis ordini tertii duobus, utrinque solitariis, quarti vel supremi saepius 4-geminatis, 140-150 \approx 20.

Hab. in *Xantholino agili*, La Plata Argentina. — Affinis *D. principii* et *D. vulgato* sed bene distinctus.

2. *Dichomyces gracilis* Thaxt., Proc. Amer. Acad. 1915, p. 29. 3678

Hab. in processu anali *Philonth.?* sp., Java (RONYER). — Perith. 200-300 \approx 22-30; recept. ad basim perith. primarii 125-160 μ ; appendices 20-25 μ , latitudo major 60-110 μ .

3. *Dichomyces chilensis* R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 210. — Pallide flava et brunneo tincta, dextero latere obscuriori; longitudo ab apice peritheci 175-220 μ ; perithecium 75-100 \approx 22-25; sporae circ. 35 \approx 3,4. 3679

Hab. plerumque ad apicem abdominis *Quedii* sp., Corral Chile America austr. — Ab aliis speciebus generis, differt forma asymmetrica, colore et perithecio apice depresso conoideo.

PEYRITSCHIELLA Thaxt. — Syll. IX p. 1130, XI p. 447, XIV p. 726, XVI p. 677.

1. *Peyritschiella subinaequilatera* Spèg., Laboulb. Argent. p. 661. *Dichomyces subinaequilaterus* Spèg., Laboulb. Mus. ital. in Anal. Mus. 3680

Nac. Buenos Aires XXVI (1915) p. 458 fig. 1. — Totus subhyalinus, corniculo excepto, parvulus, 125-150 μ altus; cellula basali subcylindrica, praebasalibus ternis, marginalibus cuneatis, anteprae-basalibus quinis. marginalibus latere altero juxtapositis, cuneatis, corniculum atrum sustinentibus, opposito latere superpositis atque in appendice 6-7-mera, sensim sursum attenuata productis, supremis receptaculi, centralibus ternis perithecium fulcentibus, lateralibus nonnullis utrinque additis paraphyses filiformes basi nigro-annulatas, 20-22 \approx 1,5-2 sustinentibus; peritheciis solitariis, ex elliptico

cylindraceis $60-65 \times 20-22$, apice obtuse umbonato-ostiolatis, plane exappendiculatis.

Hab. in *Philontho holomallo*, Arr-amba, Seioa, Afr. or. — *P. anisopleurae* Speg. affinis sed bene distincta.

2. *Peyritschella anisopleura* Speg., Laboulb. argent. p. 661 fig. 188. 3681

Dichomyces anisopleurus Speg. Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 48 fig. 15. — Parvulus, $125-150 \mu$ altus; receptaculo pallido, elongato, angusto, $90-100 \times 25-35$, cellula basali simplici cylindracea, subbasalibus binis, altera subcylindracea altera brevior obconica, praesubbasalibus quinis, tribus longioribus duobus latero-ventralibus valde minoribus et cornu infuscatulum sustentibus; serie autem suprema latere cornuto abortiva brevissima, latere altero longe producta, sursum arcuata, 8-9-cellulari, cellulis tribus centralibus, altera transversa interposita, perithecium fulcentibus, ceteris lateralibus paraphysibus filiformibus, erectis, $50 \times 4-5$, basi psallio nigro ornatis armatis: perithecio atro, subopaco, ellipsoideo-cylindraceo, $65-75 \times 22-25$, superne subconoideo, modice attenuato, ostiolo brevi, obtuso, levi, coronato.

Hab. in *Philontho* sp. ind., in Italia, Abyssinia, Argentina.

CHITONOMYCES Peyr. — Syll. VIII p. 914, XIV p. 727, XVI p. 678 XXII p. 8.

1. *Chitonomyces aculeiferus* Speg., Laboulb. ital. II, in Anal. Mus. 3682

Nac. Buenos Aires, XXVII (1915) p. 44 fig. 9. — Parvus, $140-160 \mu$ altus, totus pallidissime melleus, cellula basali turbinata, secunda subsegmentoidea; androsticho recto, abbreviato, exappendiculato; perithecio 75×35 , ventre valide convexo, dorso subrecto, ostiolo retuso, labio antico acuto brevi, postico in aculeo gracili, subrecto, $50 \times 7-8$ producto.

Hab. in *Laccophilovirescente*, Lago di Tarzo, Venet., Ital. bor.

2. *Chitonomyces Thaxteri* Speg., Las Laboulb. Argent. 1917, p. 480. 3683

Chytonomyces elongatus Thaxt., Proc. Amer. Acad. 1916, p. 13 (non Speg., II Contr. Laboulb. it. 1915).

Hab. in apice elytrae dexteræ *Lenophili* sp., Sangre Grande Trinidad. — Sporidia $40 \times 2,5$; perithecia $86-100 \times 10-12$; long. tot. ad apicem perithecii $120-155 \times 12-16$.

3. *Chitonomyces elongatus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3684

Buenos Aires XXVII (1915) p. 44 fig. 10. — *Elongatus*, gracilis, $600-650 \mu$ altus, totus pallidissime melleus, cellula basali cylindrica,

pedicelliformi, $200 \times 18-20$, saepius spiraliter torta, secunda brevi subeuboidea; androsticho recto, in appendice cylindracea, recta, perithecium duplo superante, $200 \times 18-20$ producto; perithecio subellipsoideo 18×50 , androsticho fere toto adnato, umbone subeonoideo, ostiolo minuto, labio supero subcylindraceo breviter elongato donato coronato.

Hab. in *Laccophilo* sp., Lago di Tarzo, Venet., Ital. bor.

4. *Chitonomyces ensiferus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3685 Buenos Aires XXVII (1915) p. 45 fig. 11. — Parvus, $110-115 \mu$ altus, pallide rufescens, cellulis basali et praebasali pallidioribus; androstichi cellula secunda triangulari; perithecio subcylindraceo, 65×30 , ventre ad medium appendice cultriformi 35×8 armato, ostiolo antrorsum curvulo.

Hab. in *Laccophilo virescente*, prope Coneglanum, Ital. bor. — Affinis *Ch. appendiculati* Thaxt. et *Ch. boreali* Thaxt. sed bene distincta species.

5. *Chitonomyces italicus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3686 Buenos Aires XXVII (1915) p. 46 fig. 12. — Parvus $125-150 \mu$ alto, cellula basali hyalina, praebasali gynosticho atque androsticho primo obscure melleis serius saepe nigro-opacis, caetero piceo subpellucido; perithecio subellipsoideo $75-80 \times 30-40$, ventre valide convexo, dorso subrecto appendice corniformi, curvula, apice furcata, $35-40 \times 6-8$, nigra armato.

Hab. in *Laccophilo obscuro?*, prope Coneglanum, Ital. bor. — Affinis *Ch. melanuro*, ad genus *Antoicomycetes* characteribus quibusdam vergens.

6. *Chitonomyces truncatus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3687 Buenos Aires XXVII (1915) p. 47 fig. 14. — Parvus, $175-185 \mu$ altus, $75-80 \mu$ crassus, totus obscure melleus; cellula basali pallidior; androsticho recto, obtuso, abbreviato, corniculo axillari per aetatem saepe nigrescente; perithecio late ovato, 110×50 , superne oblique truncato, minute trilobulato.

Hab. in *Laccophilo* sp. ind., prope Romam et prope Coneglanum in Italia. — Affinis *Ch. paradoxo* (Peyr.) Thxt. a quo differt ob defectum cornui ostiolaris et staturam minorem.

7. *Chitonomyces Bruchi* Speg., Laboulb. Arg. p. 479, fig. 22. — Parvus, pallide melleus, cellulis basali et praebasali confluentibus, latere ventrali convexo, dorsali subrecto verticali, sub-ostiolo acuto introrso setula longiuscula gracili plus minusve sigmoidea dorso armatus.

- Hab.* in elytrarum margine *Haliphi Bruchi*, Rosario de Santa Fe, Argent. — Magn. tot. 85-100 \times 30-35; perith. 50-60 \times 25.
8. **Chitonomyces argentinensis** Speg., Lab. Arg. p. 479 fig. 21. — Me. 3689
dioeris, clavulatus, cellula basali fere tota nigra, ceterum pallide melleus, perithecio clavulato obtuso ostiolo praelongo cylindraceo arcuato v. subrecto primo hyalino dein nigro opaco abrupte terminato.
Hab. in elytrarum margine *Canthydris debilis*, La Plata Arg. — Alt. tot. 250; perith. 50-55 \times 20-22 (sine ped.).
9. **Chitonomyces cerviculatus** Thaxt., Proc. Amer. Acad. 1916, p. 5. 3690
Hab. in elytra dext. *Laccophili* sp., Grenada et Trinidad. — Sporidia 36 \times 2,5; perith. 45-50 \times 18, rostr. 35 \times 12; long. tot. ad apicem perithecii 90-100 \times 23-27.
10. **Chitonomyces introversus** Thaxt., Proc. Am. Acad. 1916, p. 7. 3691
Hab. in artubus poster. *Laccophili*, Grand Etang Grenada. Sporidia 36 \times 3,6; perith. pars ventr. 54-60 \times 27-32; long. tot. 80-95 μ .
11. **Chitonomyces Oedipus** Thaxt., Proc. Amer. Acad. 1916, p. 7. 3692
Hab. in artubus poster. *Laccophili* sp. Sangre Grande Trinidad et Grand Etang Grenada. — Sporidia 40 \times 4; perithecia 72 \times 30, spina ext. 21-26 μ , interna 45-55 μ ; long. tot. ad apicem perithecii 100-120 \times 35.
12. **Chitonomyces Grenadae** Thaxt., Proc. Amer. Acad. 1916, p. 7. 3693
Hab. in margine elytrae dext. *Laccophili* sp., Grand Etang Grenada. — Sporidia 36 \times 2; perithecia 55-60 \times 14; long. tot. ad apicem perithecii 70-75 \times 20-22.
13. **Chitonomyces uncinulatus** Thaxt., Proc. Amer. Acad. 1916, p. 8. 3694
Hab. in margine elytrae dext., *Laccophili* sp., Sangre Grande Trinidad. — Sporidia 3,2 \times 5; perith. 72 \times 18; ejus appendix 24-30 \times 3,5; long. tot. ad apicem perith. 100-120 \times 27.
14. **Chitonomyces manubriolatus** Thaxt., Proc. Amer. Acad. 1916, p. 9. 3695
Hab. in artubus poster. *Laccophili* sp., Sangre Grande Trinidad, Grand Etang Grenada. — Sporidia 40 \times 3,5; perith. 75-85 \times 27, ejus appendix 45 \times 11; long. tot. ad apicem perithecii 125-145 \times 40-45.
15. **Chitonomyces helicoferus** Thaxt., Proc. Amer. Acad. 1916, p. 10. 3696
Hab. in margine elytrae *Laccophili* sp., Sangre Grande Trinidad. — Sporidia 25 \times 2; perithecia 54-60 \times 12,6; processus anterior 14 \times 5, posterior 18-18; long. tot. ad apicem perith. 100 \times 19.
16. **Chitonomyces bicolor** Thaxt., Proc. Amer. Acad. 1916, p. 11. 3697

- Hab.* in margine exter. elytrae sinistr. *Laccophili* sp., Sangre Grande Trinidad et Grand Etang Grenada. — Sporidia 24×2 ; perith. $60-80 \times 12-14$; long. tot. ad apicem peritheci $100-125 \mu$.
17. *Chitonomyces seticola* Thaxt., Proc. Amer. Acad. 1916, p. 11. 3698
Hab. in elytra sinistra *Laccophili* sp., Grand Etang Grenada. — Sporidia 25×2 ; perith. $50-60 \times 6$.
18. *Chitonomyces striatus* Thaxt., Proc. Amer. Acad. 1916, p. 12. 3699
Hab. in prothorace super. *Laccophili* sp., Grand Etang Grenada. — Sporidia 20×15 ; perith. $45-50 \times 10$; appendix $9-10 \times 2-2,5$; long. total. ad apicem peritheci $75-80 \times 16-17$.
19. *Chitonomyces longirostratus* Thaxt., Proc. Amer. Acad. 1916, p. 14. 3700
Hab. in margine externo elytrae dexterarum *Laccophili* sp., Sangre Grande Trinidad. — Sporidia 30×2 ; perith. venter $65-78 \times 18-20$, apex $245-260 \times 8-11$; long. tot. ad apicem peritheci $140-156 \mu$.
20. *Chitonomyces inflatus* Thaxt., Proc. Amer. Acad. 1916, p. 15. 3701
Hab. in artubus antherioribus parvi insect. ex *Dityscidis*; Manila Ins. Philipp. (BANKS). — Sporidia $40 \times 2,5$; perith. 75×25 ; longit. tot. ad apicem peritheci $100-120 \times 26-30$.
21. *Chitonomyces excavatus* Thaxt., Proc. Amer. Acad. 1916, p. 15. 3702
Hab. in margine elytrae dexter. insecti parvi ex *Dityscidis*, Manila Ins. Philipp. (BANKS). — Sporidia $45 \times 2,5$; perith. 70×20 , excl. processu dentiformi ($11 \times 18 \times 22$); long. tot. ad apicem peritheci $120-150 \times 30-35$.

HYDRAEOMYCES Thaxt. — Syll. XIV p. 727.

1. *Hydraeomyces venetus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3703
 Buenos Aires XXVII (1915) p. 52 fig. 17. — Parvulus 125μ circ. altus, pallide melleus, cellulis secunda et tertia receptaculi nec non parte infera androstichi vix obscurioribus; perithecio cylindraceo-subellipsoideo, 70×35 , ostiolo eximie prominulo brevi vix subbilabiato coronato.
Hab. in *Halipili* spec. indet. prope Coneglanum Venet., et prope Romam. — *Hyd. Halipili* Thaxt. affinis sed distinctus.

PARAHYDRAEOMYCES Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 70 (Etym. para proximum et *Hydraeomyces*). — Habitu et fabrica generis *Hydraeomyces* Thaxt. sed receptaculo quadri-cellulari.

1. *Parahydraeomyces italicus* Speg., loc. cit., fig. 35. — Totus fusco- 3704
 melleus, $125-180 \mu$ altus; receptaculo vix turbinato, cellulis recep-

tauli tribus superis nec non androstichi parte dimidia infera obscurioribus; perithecio late ellipsoideo, 80×40 , subaequilaterali, ostiolo vix prominulo.

Hab. in Haliplo striaticolli prope Romam, Ital. centr. — * neapolitanus Speg., loc. cit. p. 70 fig. 36 — A typo recedit statura paulo minore, 125-150 μ , receptaculo eximie obconoideo, cellula basali omnino hyalina, perithecio minus regulari, 60-65 \times 30-25. —

Hab. in Haliplo sp. indet., Neapolim, Ital. merid.

MONOICOMYCES Thaxt. — Syll. XI p. 675, XVII p. 915, XXII p. 9.

1. **Monoicomyces affinis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3705

Buenos Aires XXVII p. 65 (1915) fig. 31. — Parvulus, 125-150 μ altus; totus subhyalinus receptaculo 5-mero, cellula basali obconica parvula, ceteris superpositis majoribus oblique connatis, tribus inferis, sterilibus et paraphysiferis, suprema e latere externo peritheciigera apiceque antheridifera; antheridio panduriformi, sessili, 25 \times 12, apice longe inaequaliterque biflagellato; perithecio pedicello unicellulari plus minusve elongato fulto, elliptico-elongato, 50-75 \times 22-25, modice crasse obtuseque ostiolato.

Hab. in Staphilinide minuto indeterminato. Coneglanum, Ven., Ital. bor. — Affinis *M. argentinensi* Speg. nec non *M. papuano* Thaxt., *M. californico* Thaxt. et *M. invisibili* Thaxt., quae omnes potius formae ejusdem speciei videntur.

2. **Monoicomyces ternatus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3706

Buenos Aires XXVII p. 67 (1915) fig. 32. — Parvulus, 200 μ altus; luteolus receptaculo parvo, unicellulari, axi trimero, cellulis inferis nigris, suprema subhyalina, aparaphysato coronato, verticillatim ad collum genitalia terna proferente; genitalibus cellulae communis apice insidentibus; antheridiis inferis, subhorizontalibus, clavulatis, 60 \times 25, sessilibus, apice 2-4-appendiculatis, appendicibus 120 \times 10-12; peritheciis superis, pedicellatis, late ovato-ellipsoideis, 100 \times 50 (sine pedicello).

Hab. in Staphilinide minuto mycophilo indet. prope Coneglanum, Ven., Ital. bor. — Affinis *M. britannici* Thaxt. sed appendicibus antheridialibus facile dignoscendus.

3. **Monoicomyces unilaterialis** Speg., Laboulb. ital. II, in Anal. Mus. 3707

Nac. Buenos Aires XXVII p. 68 (1915) fig. 33 — Parvulus, 150 μ altus, melleus; receptaculo minuto 1-cellulare, cellulis 2 vel 3 nigris, opacis, histis hyalinis separatim coronato, utrinque super unguem antheridium clavatum, 45-50 \times 18, exappendiculatum, sessile

succubum et perithecium incubum, ovoideo-elongatum, $50-60 \times 20$, breviter pedicellatum proferente; paraphysibus paucis, e latere interno cellulae secundae appendicularis exsurgentibus, monostichis, hyalinis, parum elongatis, 100μ circ. longis.

Hab. in Staphilinide minuto mycophilo, prope Coneglanum, Ven., Ital. bor. — Affinis *M. britannici* Thaxt. sed bene distinctus.

4. *Monoicomyces venetus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3708 Buenos Aires XXVII (1915) p. 69 fig. 34. — Parvulus, $175-200 \mu$ altus, fusco-melleus; receptaculo minuto, unicellulari, 50μ alto, cellulis duobus subconoideis non nigrefactis coronato; ramis fertilibus binis oppositis, brevissimis; antheridio (in quoque ramo) clavato, subsessile, 40×20 , exappendiculato; perithecio (in quoque ramo) conoideo-lanceolato, 75×35 , lineis obscurioribus 4 spiraliter notato, pedicello gracili, hyalino, 25×10 fulto.

Hab. in Staphilinide minuto indetermin. (*Atheta* sp. ?), Coneglanum, Ven., Ital. bor.

5. *Monoicomyces zealandicus* Thaxt., Proc. Amer. Ac. of Sc. 54., 1918, 3709 p. 214. — Crassa, rudis, plerumque symmetrica; cellula basilari minuta brunnea, subbasali parva hyalina aegre visibili. Peritheciis $50-60 \times 20-22$, cellula pedicellari $18-25 \times 10$; antheridiis 35×16 , appendicibus longis, 32×5 ; totus fungus $95-108 \mu$ long. maxima lat. $40-50 \mu$.

Hab. in abdomine *Athetae* (*Acrotona*) Fungi, Auckland Nova Zelandia. — *M. nigrescenti* quoad formam et colorem proxima.

6. *Monoicomyces Ocaleae* Speg., Laboulb. Arg. p. 660 fig. 187. — Primo 3710 toto pallide melleo, basibus nigricantibus pedicellorum perithecialium exceptis, serius plus minusve stramineo fumoso praecipue in receptaculis secundariis, peritheciis nec non antheridiis; appendice primaria breviuscula 3-mera attenuato-conoidea obtusiuscula semper simplice.

Hab. in abdomine *Ocaleae* funebris, Sta Catalina B. A. et La Plata Argent. — Perith. $85-95 \times 35-40$ sine ped.; anther. 80×30 ; sporidia 32×3 .

7. *Monoicomyces infuscatus* Speg., Laboulb. Argent. in Anal. Mus. 3711 Nac. Buenos Aires XXIII (1912) p. 192, fig. 19. — Axi primario antheridiisque atris; peritheciis subhyalinis vel pallidis, longe pedicellatis, 90×25 ; appendicibus antheridiorum quaternis fasciculatis, sat elongatis, hyalinis vel fuscis. — Totus fungus $180-200 \mu$ altus.

Hab. in *Xantholino gracili*, La Plata, Argentina.

8. *Monoicomyces Homalotae* Thaxt. — Syll. XVI p. 675 — var. *Geostibae* 3712
Maire Bull. Soc. Hist. Nat. Afrique du Nord t VII, 1916, p. 8,
tab. II fig. 14-22. — A typo differt peritheciis longius pedicellatis,
ellipsoideo-oblongis, nec non antheridiorum appendicibus obsoletis
v. coalitis.
Hab. in *Geostiba Peyerimhoffii*, Chiffa « Ruisseau
des Singes », Algeria (DE BORDE).
9. *Monoicomyces Caloderæ* Thaxt., Proc. Amer. Acad. 1912, p. 162. 3713
Hab. in abdomine *Caloderæ* sp. Palermo, Temperley et Lia-
vallol Argent. — Sporidia 38×4 ; perith. inclusa cellula basil. 80 -
 90×30 - 35 ; cellula pedunc. 25×12 ; receptac. 25×20 ; append. pri-
maria 150 - 175μ ; ceterae 75 - 100μ ; antherid. 90×35 .
10. *Monoicomyces Leptotrachelæ* Thaxt., Proc. Amer. Acad. 1915 p. 30. 3714
Hab. in abdomine *Leptotrachelæ javanæ*, Sama-
ranga Java. — Perith. 75 - 110×20 - 27 ; antheridium 40×12 , ramuli
 40×5 ; longit. totalis ad apicem peritheci 185μ .
11. *Monoicomyces Stenussæ* Thaxt., Proc. Amer. Acad. 1915, p. 30. 3715
Hab. in partibus variis *Stenussæ ceylonicæ*, Sa-
marang Java. — Perithecia longiora, incl. cellulis basil. 135×34 ,
pes 40×12 ; antherid. 58×9 ; long. total. ad apicem peritheci 200μ .
12. *Monoicomyces Amauroderæ* Thaxt., Proc. Amer. Acad. 1915, p. 31. 3716
Hab. in infer. abdomine et thorace *Amauroderæ Krae-*
pelini, Samarang Java. — Perith. cellul. pedunc. 156 - 275×20 ;
cell. basil. 55 - 65×20 - 28 ; corpus 118×20 - 25 ; sporidia 30×4 ; an-
theridia 62 - 82×18 - 20 ; receptac. 32μ ; append. primaria 125 - 175
 $\times 10$ - 15 ; appendices antheridiales 40 - 150×8 .
13. *Monoicomyces denticulatus* Thaxt., Proc. Amer. Acad. 1915, p. 32. 3717
Hab. ad apicem abdominis *Homalotæ nigrescen-*
tis, Samarang Java. — Processus dentiformis 18×10 ; perith
 125 - 134×40 ; pes 40 - 45 ; antheridia 65×24 ; appendix primaria
 24×12 ; recept., excl. pede, 24μ ; long. tot. ad apicem peritheci
 215 , incl. pede.

EUMONICOIMYCES Thaxt. — Syll. XVI p. 675.

1. *Eumonoicomyces argentinensis* Speg., Laboulb. Argent. in Anal. 3718
Mus. Nac. Buenos Aires XXIII p. 188 (1912) fig. 15. — Totus sub-
hyalinus, 250 - 500μ altus; cellulis receptaculi tristiche geminatis,
inferis sterilibus, mediis masculis, superis foemineis; peritheciis
ovato-acutatis, longe pedicellatis, 130 - 170×30 - 50 .
Hab. in *Platyseto fallace*, La Plata, Argentina.

MIMEOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 163. — Receptaculum ex binis cellulis superpositis compositum; cellula super. apice singulam appendicem et cellulam pedunc. singuli peritheci gerens; appendix costans ex cellula basilari et ex cellulis pluribus superpositis; in cujus latere formantur antheridia composita varia; cellula superior gerit ramulos steriles. Antheridia costant e cellulis similaribus antheridialibus circ. senis; perithecia pedunculata normalia.

1. **Mimeomyces decipiens** Thaxt., l. c. p. 164.

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Hab. in artubus et abdomine *Quedii sorecocephali* n. sp., Llavallo Argent. — Perith. 55-65 \times 24 (pars sporogen.), 55-65 \times 24, incl. basi et pede 75-95; appendix primaria 50-55, ramuli ejus longiores 60 μ ; receptac. 50-70; long. tot. ad apicem perith. 125-150; sporidia 30 \times 2,5.

CANTHAROMYCES Thaxt. — Syll. IX p. 1131, XI p. 446, XIV p. 725 XVI p. 676.

1. **Cantharomyces Ancyrophori** Picard, Bull. Scient. France Belgique 3720

t. 50., 1916-1917, p. 444, tab. VI fig. 1. — Flavo-melleus pedunculo peritheci pallidiore; receptaculo bicellulare, cellula basali parva subquadrata, subbasali majori parum longiore quam latiore; appendicibus plerumque 3-cellularibus 2. longiore et antheridifera, apice seu cellula 3. ramulis 1-2 angustioribus multiseptatis praedita, 220-310 μ long. perithecio conoideo v. piriformi basi rotundato apicem versus sensim attenuato, 140-150 μ long. pedunculo pallide flavo, elongato quandoque plus minus abbreviato.

Hab. in *Ancyrophoro flexuoso*, St. Antonio (Tarn-et-Garonne) Gallia (LAVAGNE). — *Ch. Platystheti* et *occidentali* praecipue affinis.

2. **Cantharomyces orientalis** Speg., Laboulb. ital. II, in Anal. Mus. 3721

Nac. Buenos Aires XXVII (1915) p. 43 fig. 7. — Submediocris, 180-200 μ altus, pallide mellus; receptaculo dimero, cellulis parvis; androsticho 4-mero, in cauda subhyalina, simplici, 80-100 \times 10-12, inferne papillulosa producto, cellula secunda caeteris majore; perithecio elliptico-ovato, sursum sensim attenuato, 75-80 \times 25-30, grosse umbonato-ostiolato, pedicello unicellulari subhyalino longiore fulto.

Hab. in *Staphilinide* quodam (*Quaedius?*) prope Coneglanum, Ven., Ital. bor.

3. **Cantharomyces venetus** Speg., Laboulb. ital. II in Anal. Mus. Nac. 3722

Buenos Aires XXVII (1915) p. 43 fig. 8. — *Mediocris*, 200-250 μ altus, melleus; receptaculo dimero, cellulis parvis; androsticho 5-6-cellulare, cellula infima sessili inermi, secunda fertili saepe inermi quoque, ceteris sensim decreescentibus, ciliis rigidis erectis simplicibus armatis; perithecio elliptico-ovato, 140-150 \times 50-55, grosse longiusculeque umbonato-ostiolato, pedicello unicellulari pallidiore subaequilongo fulto.

Hab. in *Staphilinide* quodam minuto. atro, prope *Coneglianum*, Ven., Ital. bor.

4. *Cantharomyces Magellanicus* Thaxter., Proc. Amer. Ac. of Sc. 54, 3723 1918, p. 213. — Cellula basilari subhyalina, duplo longa quam lata supra leniter constricta. Peritheciis, cellula basilari inclusa, circ. 100 \times 40 pedicello 120 \times 15; appendicibus circ. 70 μ , cellula pedicellari 28 \times 18, segmento antheridiali 22 \times 20; cellula basilari receptaculi 16 \times 8, cellula subbasali 14 \times 25. Totus fungus ad apicem perithecii circ. 225 μ longus.

Hab. in parvo flavido *Staphylinide*, *Aleocharide*, Punta Arenas Magellano, Chili America austr. — Forma receptaculi, longitudine pedicelli et apice perithecii prominente distincta.

5. *Cantharomyces Trogophloe* Speg., Lab. Arg. in An. H. N. Buenos 3724 Air. XXIX (1917) p. 470, fig. 12. — Parvus pallide fumosus, ad septum primum geniculatus cellula subbasali latere dorsali plus minusve crasse nigro-marginata; cellula infima androstichi minore sterili, supera paulo majore fertili superne septo crasso nigro coronata; appendice 2-5 mera, articulis 1-3 basalibus laminaribus septis validiusculis, nigris limitatis, suprema lageniformi majuscula; gynosticho bicellulari, cellula infera depresso-subglobulosa parva supera turbinata majore, perithecio ovato recto v. parum inaequaliterali. ostiolo obtuso mediocri pallidiore coronato, cellulis basilaribus eximie evolutis.

Hab. in toto corpore *Trogophloe* tenuipuncti, in ins. Santiago La Plata, Argent. — Alt. tot. 125-150 μ , perith. 60-75 \times 30-35.

6. *Cantharomyces Valdivianus* Thaxter., Proc. Amer. Ac. of Sc. 54., 3725 1918, p. 212. — Cellula basilari receptaculi incurvata, subhyalina v. brunneola cellula superiori pro parte brunneo-translucenti; supra longe obconoidea v. cornucopiaeidea. Peritheciis 55-70 \times 18-20, pedicello e regione basali circ. 50 \times 18; sporis 39 \times 3; axis appendicum 50-70, ramis terminalibus longioribus 42 \times 7; segmento antheridiali 17 \times 19; totus fungus ad apicem perithecii 125-175 μ long.;

receptaculo 60×28 , basi 8μ , cellula subbasali circ. 50μ longa.

Hab. in *Trogophloeos* sp., Corral Chile, America austr. — Ab aliis in *Trogophloeos* viventibus differt statura majore. Cum *C. Trogophloeos* Speg. magis convenit sed differt cellula basilari elongata opaca et characteribus appendicum.

7. **Cantharomyces Chilensis** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, 3726 p. 212. — Inaequaliter obscure brunneo-fumoso tinctus, cellula basilari et pedunculo peritheciis pallidiori. Peritheciis circ. 70×30 , pedunculo et cellula basali $35-42 \times 20$, sporis circ. $28 \times 3,5$; appendicibus e apice ramulorum circ. 65μ long.; axis cellula pedicellari inclusa $35-42 \times 18$; receptaculo pede incluso, 32×20 ; totus fungus e apice peritheciis $110-130 \mu$ long.

Hab. in *Trogophloeos* sp., Baños de Apoquindo Chile, America astr. — *C. Andino* proximum sed differt statura, colore et praecipue characteribus appendicum.

8. **Cantharomyces Andinus** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, 3727 p. 210. — Brunneo-flava, cellula basali et pedicellari subhyalina; longitudo ad apicem peritheciis $90-112 \mu$; peritheciis $45-50 \times 20-22$; regio cellulae basalis et pedicellaris 28×18 ; axis appendicum cellula pedicellari inclusa, $35-40 \times 15$; appendices longiores 30×6 , receptaculum cum pede $30-34 \times 18$.

Hab. in *Trogophloeos* sp., Baños de Apoquindo prope Santiago Chile America Austr. — Proxima *C. Trogophloeos* Speg. et *C. pusilla* a quibus et aliis in *Trogophloeos* viventibus differt cellulis axialibus appendicum supra segmentum antheridiale depressis.

9. **Cantharomyces abbreviatus** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 11, tab. I fig. 5-7. — Rufo-brunneus, pellucidus, parvus; receptaculi, cellula basali obconica, cellula subbasali paulo majore, subquadrata, appendicem masculam et peritheciis pedicellum gerenti. Appendicis masculae cellula secunda antheridifera, cellula prima subapplanata, cellulis distalibus 1-3, brevibus nec discoideis, cellula apicali subhyalina subglobosa v. elongata, rarius in filamentum brevem producta. Antheridio composito multicellulari externo. Perithecio lageniformi, symmetrico, in rostrum obtusum attenuato; ostiolo subhyalino; peritheciis pedicello brevi; cellulis basalibus superioribus parvis subtriangularibus, inferiore subcylindrica. Totus fung. $90-115 \mu$ alt.

Hab. in *Trogophloeos corticino* Grav., prope Hipponem Reg. Numidiae, Africa bor.

10. **Cantharomyces numidicus** R. Maire, Bull. Soc. Hist. Nat. Afrique 3729

du Nord., t. 11., 1920, Extr. p. 12, fig. 3. — Receptaculo bicellulari, cellula basali parvula, praeter ungum subhyalina; septo primo valde obliquo; cellula subbasali obconica, basali subtriplo majore, basi extus hyalino-gibbosa fere tota nigro-suffusa, appendicem masculam apicalem et gynostichum sublateralem gerenti. Appendice mascula rufobrunnea pellucida, dolioliformi, e pedicello unicellulari, antheridio et ramis apicalibus sterilibus mox collapsis constituta; pedicello brevi, latissimo, crassissime tunicato; antheridio subgloboso, ad septum apicalem nigro-suffuso e cellula interiore et cellula superiore-interiore magnis indivisis, et cellulis exterioribus permultis parvulis constituto; peritheci pedicello breviusculo, subcylindrico, subincurvato cum peritheci cellula basali inferiore longiuscula, subcylindrica, subhyalina, conerescenti; perithecio juniori dilute melleo, lageniformi, apice in rostrum cylindricum subretusum abrupte contracto. — Totus fungus 153 μ alt.

Hab. in *Trogophloe* *Mannerheimi* Kolen, in Numidia; Africa bor.

11. *Cantharomyces italicus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3730 Buenos Aires XXVII (1915) p. 42 fig. 6. — Parvulus, 125 μ altus, totus pallide melleus; receptaculo 2-cellulari, cellula praebasali sat turgida, e latere gynostichum fulcente, superne androsticho 1 mero, cellula antheridifera 25 \times 12 in flagello 3-4 articulado producta coronato; stipite peritheciali saepius monomero omnino libero, perithecio subellipsoideo breviter crasse obtuseque attenuato-ostiolato, 75 \times 23-25.

Hab. in *Dryoptide* (Parno) algerico, prope Coneglanum, Ital. bor. — Affinis *C. Bruchii* Speg. et *C. Bordei* Pic.

12. *Cantharomyces Thaxteri* Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 100, cum icon. — Pedes atro excepto flavomelleus; receptaculo bicellulari, brevi; appendice antheridifera unica, e cellulis 2-3 subsodiametricis et ramis fasciculatis constante. Antheridio in appendicis cellula secunda evoluto, composito, introrso; appendicis ramis cellula secunda evoluto, composito, introrso; appendicis ramis perithecium superantibus, incrustatis, mox ruptis et collabescentibus. Peritheciis rarius 2. Perithecio saepius unico, subconico, subsymmetrico, pede unicellulari plus minusve elongato et cellulis basalibus 3 minoribus suffulto. Ascosporis ad $\frac{1}{4}$ inferiorem septatis, fusiformibus, utrinque acutis, mucro obvolutis, 25 \times 2,7. — Alt. a pede usque ad ostiolum: 110-135 μ ; perithecium: 60-62 \times 23-26; appendicis long. usque ad 150 μ .

Hab. in membris *Trogophloeoidilata* Er. in Galloprovincia (P. DE PEYERIMHOFF).

13. *Cantharomyces Bordei* Picard, Bull. Soc. Mycol. 1913 p. 516 fig. 5. — 3732

Receptaculo ex duobus cellulis efformato subbasali majori; peritheciis subconoideo-piriformibus, $100 \times 48-50$, pedicello unicellulari brevissimo praedito; appendice e cellula subbasali orta, supra antheridium ferenti antheridio apice duobus cellulis praedito, cellula inf. brevi lata superiori elongata cylindracea et cum praecedenti appendicem 45μ longam efformantibus; totus fungus e basi usque ad apicem perithecii 160μ long usque ad apicem appendicis 160μ . — Colore flavo-pallido, cellula basali appendicis obscuriore, cellulis terminalibus appendicis hyalinis

Hab. in *Limnicho sericeo*, Biskra Algeria (M. DE BORDE).

14. *Cantharomyces Bruchi* Speg., Laboulb. Argent. in Anal. Mus. Nac. 3733

Buenos Aires XXIII p. 179 (1912) c. ic. — Parvulus, totus pallide mellens; receptaculo bicellulari, cellula supera e latere perithecium stipitatum fulcenti, superne in flagello 10-12-articulato producta, cellula secunda (an etiam tertia basali?) flagelli antheridifera. Alt. $200-240 \mu$, perith. $100-110 \times 35-40$, flagell. 300μ longo.

Hab. in *Parno corpulento*, prov. Buenos Aires, Argentina.

15. *Cantharomyces permasculus* Thaxt., Proc. Amer. Acad. 1912, p. 165. 3734

Hab. in *Parni* specie majuscula, imprimis in elytris, Palermo Argent. et *Plenomi pubescentis*, La Plata (SPEG.) — Perith. $135-160 \times 40-50$; cellula pedunc. $45-60 \mu$; sporidia $70-75 \times 4$; receptac. $100-155 \times 40$; appendix primaria $200-255$, rami longioris 250 ; long. total. ad apicem perithecii $275-375 \mu$. — Teste cl. Spe-gazz. Lab. Argent. n. 11, haec species non differt a *C. Bruchi* Speg.

16. *Cantharomyces platensis* Thaxt., Proc. Amer. Acad. 1912, p. 166, 3735

Speg., Lab. Arg. fig. 12.

Hab. in elytris minutae speciei *Parni* (?), Palermo Argent. et *Pelonomi simplicis*, Santiago La Plata (SPEG.). — Perith. $125-150 \times 32-44$, cellula pedunc. $135-235 \times 25-35$; sporidia 60×4 ; receptacul. $60-75 \times 35-40$; appendix primaria $110-135 \mu$, rami longioris 200μ ; long. total. ad apicem perith. circ. 400μ .

HERPOMYCES Thaxt. — Syll. XVII p. 915, XXII p. 10.

1. *Herpomyces macropus* Speg., Laboulb. Arg. p. 548 fig. 91. — H. pa- 3736

ranensi Thaxt. proximus, sed masculus receptaculo androstichoque majoribus et fabrica omnino aliena recedens; foemineus autem pe-

rithecio nonnihil majore in stipite graciliore conspicue longiore abrupte contracto, thallo angustiore atque minus expanso distinctus.

Hab. in antennis *Blabera* ? sp. permagna, Orán Salta Argent. — Antherid. 22-24 \times 3; cell. bas. 30 \times 7-8; androst. 100-110 \times 5-6 (masc.); perith. 55-60 \times 25-28, ped. perith. 60-80 \times 10-15 (fem.)

2. *Herpomyces Stilopygae* Speg., Laboulb. Arg. p. 551, fig. 95. — Pel. 3737
therpomyces; masculus semper exappendiculatus; foemina scutello irregulariter cordato-ovato sursum obtusissime rotundato deorsum sulcis nonnullis nigris praeditus, perithecio lanceolato magno, cellulis parietalibus 1-seriatis angustissime linearibus donatus.

Hab. frequens in antennis *Periplanetae orientalis*, Montevideo, Buenos Aires et La Plata — Perith. tot. 175-215 \times 40-45.

3. *Herpomyces Panesthiae* Thaxt., Proc. Amer. Acad. 1915. p. 32. 3738

Hab. in antennis *Panesthiae lobipennis*, pr. *Peradeniya* Ceylon. — Ind. masc.: recept. 80; ejus cell. basilaris 40 \times 20; antheridia 60 μ ; long. tot. ad apicem antherid. 150 μ . Ind. fem.: Perith. 92 μ , ad apicem spinæ infer. 102 μ , latit. maxima 30 μ ; recept. primar. 26 \times 7, recept. secund. 60 \times 28; long. tot. ad apicem spinæ 180.

4. *Herpomyces chilensis* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3739
p. 216. — ♂ copiose 4-5 ramosus, ramulis antheridia angusta plerumque curvata gerentibus, 18 \times 2; totus 65 μ circ. long. — ♀ caracteribus praecipuis ut in *H. Nyctoborae* cuius varietas tantum apparet. — Totus fungus 175-220 μ long. Perithecio e superiori parte cellulae basali usque ad apicem spinæ terminalis 140-165 \times 18; spinis subterminalibus 30-32 μ , terminalibus 10 μ ; regione basali 15-17 \times 22-24; receptaculo secundario 18-20 \times 28-32.

Hab. in antennis insecti cujusdam (« wingless roach »), prope Baños de Apoquindo, Chile, America austr.

AMORPHOMYCES Thaxt. — Syll. XI p. 448, XIV p. 728.

1. *Amorphomyces italicus* Speg., Laboulb. ital. II in Anal. Mus. Nac. 3740
Buenos Aires XXVII (1915) p. 38 fig. 1. — Foemina adhuc tantum nota, parvula, 100 μ circ. alta, hyalina, primo erecta dein arcuato-incurvata; cellula basali superne a cellulis peritheciigeris constrictione et septo nigro valido obliquo separata; perithecio subclavulato, 24-26 μ lato, obtuse umbonato-ostiolato, umbone leniter fusco-flavescente.

Hab. in *Atheta* quadam indeterminata prope Conegliano, Ital. bor.

2. *Amorphomyces Trogophloeae* Speg.; Lab. Arg. in An. Mus. N. Buen. 3741

Air. XXIX (1917) p. 465, fig. 7. — *Masculus cylindraceus*, rectus, cellula basali hyalina, praebasali duplo longiore rufescente; antheridio vix inclinato subconoideo donatus. Foemina elongata arcuata v. sigmoidea mediocris, tota hyalina, cellula basali obpiriformi ungue magno nigro imposita, superne septo discoidali rufescente non v. vix obliquo limitata; perithecio erecto plus minusve arcuato-naviculari, obtuse umbonato ostiolato, cellulis basilaribus minimis parum perspicuis.

Hab. in toto corpore *Trogophloeï atramentarii*, ins. Santiago pr. La Plata Argentina. — Alt. tot. 40-42 μ (masc.) 100-125 (fem.); perith. 90-100 \times 30-35.

3. *Amorphomyces Ophioglossae* Thaxt., Proc. Am. Acad. 1912, p. 167, 3742 Speg., Lab. Arg. fig. 5.

Hab. in capite et abdomine *Ophioglossae* sp., Llavallo, Tucuman Argent. (SPEGAZZINI). — Ind. masc.: tot. longit. cum pede 55-65 \times 5; cellula antheridialis 28-32 \times 6-7. Ind. femin.: cell. basil. 8 \times 8; longit. total. cum pede (7-11 μ), 100-120 \times 30-35.

4. *Amorphomyces rubescens* Thaxt., Proc. Amer. Acad. 1912, p. 167, 3743 Speg., Lab. Arg. fig. 6.

Hab. in abdomine *Diestotæ*, Tempesley, Llavallo, Homalotæ in Argentina. — Ind. masc.: long. tot. incluso pede 65 μ ; cellulae basil. binæ 16-18 \times 6; antherid. 35-37 \times 9; rostr. 19-20 μ ; indiv. fem. cell. basil. 7 \times 9; longit. tot. cum pede 140-165 \times 25.

TETRANDROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 168. — Ind. masc. ex quatuor cellulis superpositis constantes; cellula superior coronam antheridiorum gerens. Ind. feminea ut in *Dicoiomycetæ*.

1. *Tetrandromyces Brachidæ* Thaxt., Proc. Amer. Acad. 1912, p. 168. 3744

Hab. in superf. sup. abdominis *Brachidæ Reyi*, Llavallo Argent. — Ind. masc.: antheridia 23 \times 8, eorum unio 16 μ lata; long. tot. cum pede 60 μ ; indiv. fem.: sporidia intra perith., masc. 28-30 \times 45, feminea 40 μ ; perith. 200-235 \times 50-65, processus subtermin. 8 μ long.; cellula pedunc. 60 \times 20; cellula appendicis sterilis 20 \times 12; long. total. ad apicem perith. 250-280 μ .

DIOICOMYCES Thaxt. Syll. XVI p. 679.

1. *Dicoiomyces Anthici* Thaxt. — Syll. XVI p. 679 — var. *fuscescens* 3745

R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 14, tab. I fig. 9-10. — A typo differt, colore intensius melleo, cellula subbasali valde appianata, cellula terminali sterili tota fu-

liginosa, minus elongata. Totus fungus 240-250 μ alt.

Hab. in *Anthico Rodriguesi* Latr., prope Hipponem Reg. Numidiae, Africa bor.

2. *Dioicomycetes italicus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3746 Buenos Aires XXVII (1915) p. 51 fig. 16. — Masculi lineares pusilli, omnino hyalini, medio 1-septati, foeminei mellei, submajusculi, 300-325 μ alti, eximie ubique pellucidi, receptaculo clavulato-obovato, 75 \approx 25, bicellulari, cellulis subaequilongis, mucrone conico, recto, brevi, obtuso coronato; pedicello obconoideo, abbreviato, 65-75 \approx 25, pallido; perithecio majusculo, 200 \approx 50, leniter arcuato, subnaviculari, cingulis prominulis tribus subobsoletis ornato.

Hab. in *Anthico hispidio*, Coneglanum, Venet., Ital. bor. — Affinis *D. Anthici* Thaxt. sed bene distinctum.

3. *Dioicomycetes falcatus* Speg., Lab. Arg. p. 522, fig. 65. — Masculus 3747 brevis, receptaculo toto infuscato, antheridio hyalino aequilongo armato. Foemineus mediocris eximie falciformis, perithecio obscure fumoso ex ovato arcuato-naviculari sursum in ostiolo cylindrico crasso obtuso producto, deorsum cellulis basilaribus optime evolutis, dorsali majore turgida, sporis fuliginosis nigro-ungiculatis, pedicello hyalino v. subhyalino breviusculo leniter clavulato, receptaculo normali recto subfuliginéo appendice recta acutiuscula.

Hab. in thorace et elytris *Anthici postmaculati*, Sta Catalina B. A., Argentina — Recept. cum anther. 45-48 μ (masc.); perith. 115-120 \approx 50-55 (sine ped.); alt. tot. 135-160 μ .

4. *Dioicomycetes Formicillae* Thaxt. (enfr. n. 17). — * *D. anthicicola* Speg., 3748 Lab. Arg. p. 523, fig. 66 a. — Forma praecedenti praecipue accedens, a qua tamen parte basilari perithecii infuscata, sporis pallidioribus receptaculoque nec non ejusdem appendice vix fumosis differre videtur.

Hab. in elytris et artib. *Anthici floralis*, La Plata Argent. — Alt. tot. 185-200 μ , perith. 85-100 \approx 55 (sine ped.). — *D. brachygnatus* Speg., l. c. p. 524, fig. 66 b. — A typo recedit magnitudine semper paulo minore, peritheciis pro ratione brevioribus crassioribusque, ostiolo, peritheciis, nec non sporis pallidioribus.

Hab. in thorace et elytris *Formicillae Bruchi*, La Plata Arg. — Alt. tot. 200-275 μ ; perith. 100-125 \approx 55-60 (sine ped.).

5. *Dioicomycetes glossophorus* Speg., Lab. Arg. p. 525, fig. 67. — Ma- 3749 sculus parvulus linearis, antheridio ovato minuto donatus. Foemineus mediocris pallidus rectus perithecio ellipsoideo v. subbiconico utrimque sensim attenuato, dorso et ventre plus minusve convexo, sursum in ostiolo partem ventralem versus incurvato obtuso pro-

ducto, labio ostiolarum infero appendice linguaeformi angusta sigmoidea erecta v. pendula ornato, cellulis basilaribus non perspicuis, in pedicello brevi obconico sensim angustato; sporis hyalinis; receptaculo pallido, cellulis subbasali et infera appendicis fumosis.

Hab. in tibiis et abdomine *Anthici postmaculati*, Santa Catalina B. A., Argent. — Recept. cum anth. 40 μ (masc.); perith. 100-110 \times 40-42 (sine ped.); alt. tot. 150-165 μ .

6. *Dioicomyces refractus* Speg., Laboulb. Arg. p. 528, fig. 71. — Ma- 3750
sculus adhuc ignotus. Foemineus majusculus flavescens-fumosus, pedicello ovato-lanceolato ob cellulam basilarem ventralem hypertrophicam abrupte refracto, ostiolo obtusissimo subtruncato, pedicello obconico valde brevior, receptaculo normali appendice longiuscula subincurva armato; sporis hyalinis ungue nigro donatis.

Hab. in thorace et elytris *Anthici postsignati* in ins. Santiago, La Plata. — Alt. tot. 225-250 μ ; perith. 120-130 \times 55-60 (sine ped.).

7. *Dioicomyces infuscatus* Speg., Lab. Arg. p. 527, fig. 68. — Mascu- 3751
lus ignotus. Foemineus totus castaneus, mediocris, perithecio late ovato leniter inaequilaterali et inclinato apice abrupte in ostiolo brevi obtuso producto, cellulis basilaribus parum manifestis, pedicello obconico brevi crasso fusco, receptaculo crasse infuscato appendice longiuscula armato.

Hab. in elytris *Anthici pallidicoloris*, La Plata — Alt. tot. 175-190 μ ; perith. 105-115 \times 58-60 (sine ped.).

8. *Dioicomyces pallidus* Speg., Lab. Arg. p. 527, fig. 70. — Masculus 3752
linearis rectus subhyalinus, margine nigrifactus. Foemineus mediocris rectus v. plus minusve sigmoideus, receptaculo excepto infuscato, totus pallide melleus; perithecia cymbiformia ventre plana v. vix concava dorso valide convexa, sursum in ostiolo subcylindrico sublongiusculo producta, cellula basilari ventrali leniter prominula et perspicua, pedicello recto v. arcuato brevior hyalino suffulta; receptaculum atrum, appendice ovata crassa obtusa concolore ornatum.

Hab. ad genitalia *Anthici postmaculati*, Santa Catalina B. A., Argent. — Recept. cum anther. 45 μ (masc.); alt. tot. 175-200 μ ; perith. 90-100 \times 35-45 (sine ped.) (fem.).

9. *Dioicomyces rostellatus* Speg., Lab. Arg. p. 529, fig. 72. — Mascu- 3753
lus non inventus. Foemineus obscure fumoso-castaneus, perithecio erecto subnaviculari-cylindraceo dorso recto ventre convexiore saepius sursum leniter incrassato abrupte in ostiolo crasso brevi co-

nico obtuso angustato, sub ostiolo cornu crassiusculo modice patente armato, cellulis basilaribus parum perspicuis; pedicello obconico crasso obtuso pallidiore basi geniculatim receptaculo adfixo; receptaculo intense colorato, appendice recta acuta sublongiuscula coronato.

Hab. in apice elytrarum *Anthici floralis*, La Plata. — Alt. tot. 150-160 μ ; perith. 90-100 \times 45 (sine ped.).

10. *Dioicomycetes subtorulosus* Speg., Lab. Arg. p. 430, fig. 73. — Ma- 3754
sculi desiderati; foeminei mediocres pallidissimi rectiusculi v. lenissime subsigmoidei, peritheciis erectis subnavicularibus margine ventrali recto dorsali convexo ibique in tertio infimo dentibus 2 v. 3 serratis sursum abrupte conoideo-ostiolatis, apice obtusissime rotundatis, pedicellis obclayulatis hyalinis, parum brevioribus, receptaculo subhyalino appendice brevi obtusa fumosa, ungue crasso atro.

Hab. in abdomine *Anthici decerpti* in ins. Santiago, La Plata — Perith. sine ped. 110-120 \times 35-40; alt. tot. 225-250 μ (femin.).

11. *Dioicomycetes torulosus* Speg., Lab. Argent. p. 531, fig. 74. — Ma- 3755
sculus parvulus fere achrons linearis, antheridio majusculo lanceolato donatus. Foemineus majusculus totus pallidissime melleus v. hyalinus; perithecio maximo subfusoides leniter incurvato, parte media supra utrinque 3-gibbosa, ceterum fere laevi, cellulis basilaribus parvis triangularibus; pedicello e cylindraceo subfusoides parum brevior; receptaculo pro ratione parvo appendice conica recta brevi ornato.

Hab. in apice elytrarum et abdominis *Anthici decerpti* in insula Santiago, La Plata. — Masc.: recept. cum anther. 55 μ ; fem.: alt. tot. 300-350 μ ; perith. sine ped. 175-200 \times 45-50.

12. *Dioicomycetes uncinatus* Speg., Lab. Arg. p. 582, fig. 76. — Mascu- 3756
lus parvus fere linearis infuscatus, antheridium conoideum hyalinum fulcens. Foemineus majusculus, perithecio ovato-elongato valide arcuato subfuligineo, in ostiolo sensim attenuato apice obtusiusculo producto, cellulis basilaribus perspicuis sed non v. vix prominulis; pedicello subfusoides hyalino sursum valido attenuato; receptaculo plus minusve nigrefacto, appendice conica acutiuscula v. leniter arcuata.

Hab. frequens in thorace et elytris *Anthici parvi*, Sta Catalina B. A., Arg. — Recept. cum anther. 50 μ (masc.); perith. sine ped. 85-100 \times 38-45, alt. tot. 250 μ (fem.).

13. *Dicoicomycetæ endogæus* Picard, Bull. Soc. Mycol. Fr., 1913, p. 523, 3757

fig. 6. — ♂. Longe cylindraceo-clavulatum e 4 cellulis constituto, basi pede seu cellula nigra adfixo; cellulis 3 inf. receptaculum efformantibus, 4^a v. superiori antheridio sistente et tubulo acuto antheridio longitudine subaequante terminato; totus 95 μ long., antheridium 65 μ long. basi 4 μ lato, supra 8-9 μ — ♀. Receptaculum e quatuor cellulis constitutum, subbasali lateraliter perithecium gignenti; perithecio infra e cellula pedicellari elongata donato, elongato, basi leniter inflato apice sensim attenuato obtuso, 80 μ longo 33 μ lato, pedicello 30 \times 15. — Totus, long. maxima, 175 μ ; hyalinus v. pallide succineus perithecio et cellula tertia receptaculi parum obscurioribus.

Hab. ad helitras Anilli caeci, Foix Ariège Gallia.

14. *Dicoicomycetæ umbonatus* Thaxt., Proc. Am. Acad. 1912, p. 170, 3758

Speg., Lab. Arg. fig. 75.

Hab. in basi elytrae prope marginem inter. Anthici parvi, Temperley et Sta Catalina, Argent. — Indiv. masc., cellula basil. cum pede 20 μ ; tot. longit. ad basim rostro 35 \times 5; rostrum 12 μ . Ind. fem. Perith. ad apicem 70-78 \times 40-43 (incl. umbone); cellula pedunc. 40-42 \times 12-15; receptac. ad apicem appendicis, incl. pede 42 μ ; tot. long. 135-145 μ .

15. *Dicoicomycetæ melleolaris* Thaxt., Proc. Amer. Acad. 1912, p. 170, 3759

Speg., Lab. Arg. fig. 69.

Hab. in elytra, imprimis dextera Anthici parvi, Palermo Llallol et Sta Catalina Argentina. — Ind. masc. long. tot. 45 \times 7,5; indiv. femin. sporidia 28-30 \times 3,5; perith. 99-100 \times 26-32; cellula pedunc. 65-90 \times 16; cellula appendicis 15-16; recept. incluso pede 28.

16. *Dicoicomycetæ Formicillae* Thaxt., Proc. Am. Acad. 1912, p. 169, 3760

Speg., Lab. Arg. fig. 66. — Cnfr. n. 5.

Hab. in elytris Formicillae strangulatae et leporinae, Palermo, Llallol, Temperley La Plata, Argent. — Indiv. masc. long. total. cum pede et rostro 60-70; cellula basilaris 20 \times 8; indiv. femin., sporidia fem. 40-42 \times 8, masc. 35 \times 5; perith. 145-165 \times 45-50, cellula pedunc. 140-180 \times 25; recept. cum pede et cellula appendicis 40-65.

17. *Dicoicomycetæ angularis* Thaxt., Proc. Am. Acad. 1912, p. 171, Speg., 3761

Lab. Argent. fig. 64.

Hab. in apice elytrae et abdomin. Anthici parvi, Temperley et Llallol et Sta Catalina, Argent. — Indiv. mascul.: long.

tot. excl. rostro 30×6 ; rostr. 8μ ; cellula basil. excluso pede 8μ —
Indiv. fem.: Perith. $80-94 \times 35-42$, cellula pedunc. $98-120 \times 15$; recept. ad apicem appendicis 38; long. total. 185μ .

BORDEA Maire, Bull. Soc. Hist. Nat. Afrique du Nord t. VII, 1916, p. 13 (Etym. a **OL DE BORDE** entomologo gallico sollertissimo). — Antheridium unicellulare, in appendice masculo simplici acrogenum; appendices steriles nullae; appendix mascula e cellula terminali receptaculi orta, basi nigro-annulata; perithecium asymmetricum, e cellula subbasali ortum.

1. **Bordea coronata** Maire, l. c., tab. I fig. 2-5. — Minor ($60-75 \mu$ long. 3762 tot.) dilutissime brunneola; receptaculum ($30-38 \mu$ long.) 3-cellulare; cellulae basalis pede atrato; appendix masculus ($28-30 \times 4-5$) conicus v. subfusiformis, transverse 2-3 septatus, basi nigro-annulatus, apice antheridium conicum rectum v. curvulum, lateraliter cornutum gerens. Perithecium ($62-75 \times 26-28$) pedunculo unicellulari brevi a receptaculo non v. vix discreto suffultum, extus ventricosum; intus rectum, in collum breve constrictum; ostium apicale, basi apophysibus 8 coronatus; ascosporae fusiformes, utrinque acutae, inaequaliter 1-septatae, hyalinae, laeves, strato mucoso involutae, $26-30 \times 2$.

Hab. in membris et in abdomine *Brachyglutae Aubei* Tourn., pr. Biskra Algeria, Africa bor.

2. **Bordea platensis** Speg., Lab. Arg., An. Mus. Buenos Aires, 1917, 3763 XXIX p. 463, fig. 3 (ut Sectio gen. *Acompsomyces* Thaxt., Syll. XVI p. 692, XVII p. 917, XXII p. 11. — Pusillus, ramulo antheridifero 3-cellulari, cellula basali ceteris conspicue crassiore septo nigro incrassato ibique valido constricta, cellulis duabus superis gracilibus subhyalinis horizontaliter septatis, antheridio apicali mediocre elongato-conico subinermi, perithecio cum pedicello abrupte geniculato-inflexo subolivaceo appendiculato, ostiolo subcylindrico elongato pallidiore coronato.

Hab. in elytris *Decarthri simplicis*, insula Santiago Argentinae. — Alt. tot. $100-110 \mu$; perith. $60-65 \times 20-25$.

3. **Bordea decarthricola** Speg., Lab. Argent., An. Mus. Buen. A., 1917, 3764 XXIX p. 462 fig. 2. — Pusillus, ramulo antheridifero 3-cellulari crassiusculo fumoso, septo praeapicali oblique nigro, antheridio apicali obliquo eximie 1-spinoso, perithecio recto subhyalino subexappendiculato, ostiolo subabbreviato.

Hab. in toto corpore *Decarthri rufipennis*, insul. San-

tiago La Plata, Argentinae. — Alt. tot. 100-110; perith. 75 × 30.

SYNANDROMYCES Thaxt., Proc. Am. Acad. 1912, p. 174. — Receptaculum e cellulis binis constans, una cum cellula basilari appendicis structuram compactam constituens; perithecia majuscula, cellulam ascogenam unicam et quatuor cellulas parietales in quaque serie gerens, cellula basilari brevi isthmum angustum inter cellulam basilem et receptaculum formans; antheridia in fasciculum dense conferta, rostris divergentibus; trichogynum bicellulare. — Genus *Acompsomyces* proximum.

1. **Synandromyces Telephani** Thaxt., Proc. Am. Acad. 1912, p. 175. 3765

Hab. in eiytris, prothorace, etc. *Telephani* sp., Temperley et Llavallol, Argent. — Sporidia 40 × 6; perith. inclusa basi 45-60 × 35; appendix, inclus. antheridiis, 45-50 × 20.

2. **Synandromyces geniculatus** Thaxt., Proc. Amer. Acad. 1912, p. 176. 3766

Hab. superf. superf. abdominis *Telephani* sp., Temperley et Llavallol, Argent. — Sporidia 30 × 5; perith. 135-155 × 45-60; processus rostratus 45-50 μ; appendix, incluso antheridio, 30 × 20 (pars libera).

3. **Synandromyces javanus** Thaxt., Proc. Amer. Acad. 1915, p. 34. 3767

Hab. in artubus insect. ad sect. *Telmatoxylus* pertinentis, Samarang Java. — Perith. 120-135 × 40-50; recept. incluso pede 40 × 32, pars libera appendicis antheridialis 35-40 × 22-25, long. tot. ad apicem peritheci 155-175.

ILYOMYCES Picard, Bull. Scient. France Belgique t. 50., 1916-1917, p. 445. — Gen. *Acallomyces* Th. proximum, a quo differt praecipue appendicibus ramosis nec simplicibus, cellulis receptaculi obliquis basali semper bene evoluto.

1. **Ilyomyces Mairei** Picard, l. c. p. 446, tab. VI fig. 3. — Hyalina. Re- 3768

ceptaculo bicellulari, 40 μ long., cellulis septo obliquo divisus, et tunc subparallele dispositis, basali infra fuscata; subbasali cellulam alteram pedunculum peritheci ferente alteram appendicem; perithecio subellipsoideo-elongato, parum incurvato 110-115 × 45, apice poro 4-labiato praedito, labiis inaequalibus, duobus apophysatis; appendicibus pedunculatis apice cellulis duobus divergentibus singulis antheridiis duobus phialaeformibus terminatis, 75 μ long. — Totus fungus 150-155 μ long.

Hab. in *Stenoelegante*, Bonde (Vaucluse), Gallia.

2. **Ilyomyces Lavagnoi** (Picard) Picard, Bull. Scient. France Belgique 3769

t. 50., 1916-1917, p. 446, *Acallomyces Lavagnei* Picard F., Bull. Soc. Entom. de Fr. 1913, n. 18, p. 462, 3 fig. — Peritheciis flavidis, oblongis utrinque parum attenuatis, 170-250 μ long.; apice labiis quatuor mamillaribus clausis; sporidiis hyalinis oblongo-clavulatis bilocularibus, 50 μ long.; appendice basilari perithecii 80-95 μ long. ex tribus cellulis superpositis constituto, cellula terminali duobus raro tribus antheridiis elongatis obclavatis 20 μ long. praedita; cellulis duobus receptaculi angustis oblique subparallelis.

Hab. ad thoracem, élythras raro ad abdomen *Stenus aceris* in silva St. Guilhem-le-Desert (Hérault), Gallia (Leg. LAVAGNE).

STIGMATOMYCES H. Karst. — Syll. VIII p. 912, XIV p. 729, XVI p. 680, XXII p. 11.

1. *Stigmatomyces asymmetricus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 718. — Receptaculo crasso et crasse tunicato pedem versus angustato, cellula basilari subbasali longiore, incurvata pallidiori v. hyalina, subbasali demum flavo-rubra; cellula pedicellari appendicum rubro-succinea, duplo longiore quam latiore; cellula pedicellari perithecii cum cellulis appendicum concolori; ventre perithecii granuloso-rugoso, 150 \times 180 \times 40-45, sporis circ. 25 \times 2,5, receptaculo 85-100 \times 25-28, appendicibus 46 \times 10, quorum cellula pedicellari 25 \times 10, totus fungus 250-280 μ longo.

Hab. in abdomine *Agromyzidae* sp., Kamerun Africa occ. trop. — *S. Scaptomyzæ* proxima.

2. *Stigmatomyces divergens* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3771 p. 719. — Subsigmoideus, crassiusculus obscure rubro succineo-brunneo, receptaculo hyalino perithecio brevior; cellula basilari appendicum brevi, valida, extus fortiter convexa, rubro-brunneo tineta, appendicibus caeterum brevibus, crassis, basi angustato-constrictis obscurioribus; cellula pedicellari perithecii magis lata quam longa, secundaria angustiori; perithecio 155-170 \times 42-50, sporis circ. 25 \times 3, appendicibus 42-48 \times 4, receptaculo 80-100 \times 28, totus fungus 250-280 μ long.

Hab. ad capitem et alam *Agromyzidae* sp., Kamerun Africa occ. trop. — Proxima *S. Drapetis*.

3. *Stigmatomyces macrandrus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 720. — Elongatus, gracilis, stramineus supra receptaculum hyalinum infra ventre brunneo tineto; receptaculo plerumque curvo diametro aequali, cellula basali quandoque parum latiore; appendicibus vix leniter divergentibus, longis, axe e cellulis 7-8

sensim minoribus efformato; cellula primaria et secundaria perithecii subaequalibus; ventre recto, apice perithecii prominenti incurvato infra leniter expanso, supra prominenter labiato; perithecio 190 μ , ventre 70-75 \times 30-35, sporis (in perithecio) circ. 30-35 \times 35, appendicibus 100-110 \times 16, receptaculo 210-245 \times 21, totus fungus 385-450 μ long.

Hab. in *Anthomyia* sp., (Dipt.), Kamerun Africae occ. trop. — *Stig. dubio* proxima species.

4. *Stigmatomyces tortilis* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3773 p. 721. — Breviuscula et crassiuscula, curvula, sordide flavescens supra receptaculum hyalinum brunnea; cellula pedicellari perithecii magis lata quam longa, ventre lato et infra leniter inflato, cellula distali prominula collo incurvato crasso longitudine subaequali, cellulis extus guaina spiraliter contorta usque ad apicem abrupte angustato praeditis; perithecio 140 \times 32-35, sporis circ. 25 \times 3,5, appendicibus 60 μ long. eorum cellula basali 14 \times 6, receptaculo 80-90 \times 18-21, totus fungus 225-250 μ long.

Hab. in abdomine *Anthomyia* sp., Kamerun Africa occ. trop. — Proxima *S. Limnophorae* sed omnino diversa.

5. *Stigmatomyces Borbori* Thaxter, Proc. Amer. Ac. of Sc. 51., 1918, 3774 p. 724. — Cellula basali receptaculi infra angustata v. medio contracta, subbasali lata et distincte longiori, diametro subuniformi marginibus parum convexis; cellula pedicellari appendicum, latiori quam longiori, extus convexula, axe plerumque 6-cellulari, basali flavo-brunnea, latiori quam longiori subsymmetrica, caeteris hyalinis sensim angustioribus extus abrupte convexis, ambitu late irregulariterque ellipsoideo; cellula pedicellari perithecii utrimque libera longiore quam latiore, basali in prominentiam abrupte desinente, interiori supra basim cavitatis ascigeræ extensa; perithecio apice oblique incurvato; perithecio 110-120 \times 35, sporis 35 \times 4,5, appendicibus antheridiis inclusis 56 \times 25, receptaculo 65-68 \times 24, totus fungus 200-240 μ long.

Hab. in *Borbori* sp. (Dipt.), Kamerun Africa occ. trop. — *St. Borboridino* proxima species.

6. *Stigmatomyces Borboridinus* Thaxter, Proc. Amer. Ac. of Sc., 53., 3775 1918, p. 725. — Receptaculo hyalino, basi angustato, cellula pedicellari appendicum breviuscula basi lata subobliqua, appendicibus ex tribus cellulis flavo-brunneis efformatis, basali parum obscuriore, parum longiore quam crassiore, subbasali statura minori extus magis convexa parum latiori quam longiori tria antheridia latere interno

conferta apice acuminato-incurvata gerentibus; perithecio erecto v. parte distali leniter curvulo, cum axe cellulae basalis et pedicellaris commune sed ventre distincte divergente; peritheciis $100-120 \times 28-32$, sporis $36 \times 5,5$, apparatu pedicellari 35×20 supra, 14μ infra; appendicibus apicibus antheridiorum inclusis 42×22 , receptaculo $50-64 \times 17-20$; totus fungus $190-210 \mu$ long.

Hab. ad crura *Borbori* sp. v. affinis. — *St. Borbori* proxima spec.

7. *Stigmatomyces contortus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3776 p. 726. — Hyalinus; cellula pedicellari et apparenter cellula basali interna pedicellum perithecialem gracilem efformantibus cum receptaculo juxta eum abrupte incurvato et pede ad ventrem approximato, appendicibus libere projectis e parte incurvata receptaculi; cellula basali receptaculi abrupte incurvata et infra parum angustata, subbasali parum longiori et crassiori; perithecio duobus prominentiis donato, 100×35 , parte pedicellari 37×17 , sporis $32 \times 3,5$, appendicibus terminalibus 20×8 , lateralibus basi 18×14 , receptaculo $45-50 \times 15$, appendicibus in exemplaribus junioribus 40×9 .

Hab. ad alas *Borbori* sp. (Dipt.) vel generis affinis, Kamerun Africa occ. trop.

8. *Stigmatomyces divaricatus* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3777 p. 727. — Longiuscula et gracilis ambitu irregulari, subhyalina, appendicibus et perithecio, pedicello incluso, fere symmetrica divergentibus e receptaculo et angulum obtusum efformantibus; caeterum *St. Borbori* affinis a qua differt praecipue appendicibus quorum cellula principali longiori quam latiori est nec contra, cellula androfori tres antheridia gerenti et a basali distincte separata; peritheciis $120-135 \times 28-33$, parte pedicellari circ. 68×18 , sporis 40×5 , appendicibus $75-86$, cellula pedicellari 18×14 , receptaculo $112-130 \times 18-24$, totus fungus $280-315$.

Hab. in *Borboro*, Kamerun Africa occ. trop. — *S. Borbori* valde affinis.

9. *Stigmatomyces italicus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3778 Buenos Aires XXVII (1915) p. 71 fig. 37. — Pallidissime melleus, parvus, 300μ altus; cellulis subperithecialibus majusculis; perithecio late ovato, 200×55 , in collo praelongo, 125×12 , apice oblique apiculato producto; synantheridio sessili, 40×12 , basim perithecii vix attingente, fuscule, octomero.

Hab. in *Borboro* (fimetario?), prope Coneglanum, Ven., Ital. bor. — *St. papuano* Thaxt. valle affinis, synantheridio

breviori tantum distinctus.

10. *Stigmatomyces pentandrus* Thaxt., Proc. Am. Acad. 1917, p. 663. 3779

Hab. in basi artuum posteriorum *Muscinae* e ejusdam ad *Borboridea* spectantis, pr. Cartago Costa Rica (CALVERT).—
Sporidia 36×4 ; perith. 124μ ; venter 42.51×42.44 ; rostrum 50.54μ apex 22.25μ ; appendix 34×10 ; recept. $110-170 \times 22$; long. tot. ad apicem perith. 245-315.

11. *Stigmatomyces Chilomenis* Thaxter, Proc. Amer. Ac. of Sc. 53., 3780

1918, p. 748 — Subhyalinus, leniter viridi-flavo tinctus; receptaculo parvo, cellula basali angusta subgeniculata, e subbasali minori subtriangulari oblique separata; cellulis axialibus appendicum quatuor subaequalibus parum latioribus quam longioribus, omnibus antheridium unicum gerentibus, terminali typice duos, antheridio terminali excepto; cellula pedicellari peritheci parva et angusta, medio constricta, rugula levi praedita; secundaria minori oblique separata; cellula basali basin cavitatis ascigerae circumdanti, apice summo appendicibus erectis praedita; perithecio e apice appendicum regione basali inclusa 135μ long., appendicibus longioribus 30μ long., sporis 28×3 ; appendicibus $60 \times$ basi 7; receptaculo 60×18 pede incluso, totus fungus circ. 200μ long.

Hab. ad elytras *Chilomenes lunatae* (Dipt.), Nairobi Africa or. britannica. — Inter *S. virescenti* et *coccinelloidi* media.

12. *Stigmatomyces Dacinus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3781

p. 745. — Habitus rigidus, erectus, rectus v. curvulus, parietibus crassiusculis; cellula basali receptaculi pallide brunneo-flava, acutata subbasali usque duplo longiore, hyalina, diametro subuniformi; cellula pedicellari appendicum angusta, curvatula; axe appendicum plerumque 8, quandoque 7 cellulis constituto, cellula basali brunneo-flava sterili, caeteris hyalinis oblique septatis, omnibus duobus antheridiis oblique superpositis rectis acutatis donatis; cellula pedicellari peritheci hyalina duplo et ultra longiore quam latiore, basali parva subtriangulari ventre concolori; ventre brunnescenti-flavo, recto, subsymmetrico, late ellipsoideo, cellulis parietalibus subcirculariter dispositis collo parum distincto praedito, parte cacuminali distincte producta; perithecio $140-160 \times 42$ majoribus usque ad 180×50 , projectione terminali $10-15 \mu$ long., sporis 42×3.2 , appendicibus 70-85, receptaculo 86-105, totus fungus 280μ circ. long. exemplaribus majoribus usque ad 350μ .

Hab. in *Daco* sp. (Dipt.), Sarawak Ins. Borneo.

13. *Stigmatomyces arcuatus* Thaxter, Proc. Amer. Ac. of Sc. 51., 1918, 3782 p. 735. — Flavescens, perithecium et appendicibus rubrescentibus, parum regulariterque arcuatus, curvatura apicali plerumque magis abrupta; axe appendicum quinquecellulari, duobus inferioribus saturatius coloratis, basali latiori quam longiori, sterili, subbasali quandoque latiori, antheridio in cellula quinta solitario, in caeteris, basali excepta, duobus; appendicibus crassiusculis, cellula pedicellari perithecii latiuscula, ventre parum asymmetrico, in parte distali plus v. minus inflato, a collo crasso parum distincto; perithecio 100-112 \times 28-35, sporis circ. 28 \times 3-5, appendicibus circ. 50 \times 12, receptaculo 45-50 \times 16, totus fungus 180-200 μ long.

Hab. ad crura et alas *Diopsidis* sp. (Dipt.), Kamerun Africa occ. trop.

14. *Stigmatomyces longirostratus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 736. — Eximie elongatus, undique pallide sordideque flavo-brunnescenti, cellula basali infra parum curvato-angustata; cellula pedicellari appendicum quandoque circ. longiore quam latiore; appendicibus leniter divergentibus, elongatis, angustis, axe 12-cellulari, basali sterili parum longiori quam latiori saturatius colorata, subbasali concolori, caeteris omnibus dua antheridia gerentibus, ultima excepta unum tantum gerenti; cellula pedicellari perithecii cum subbasali concolori; apice perithecii extus curvulo, lato, leniter inflato; perithecio 320 \times 40, sporis 35 \times 4, appendicibus 140 \times 14, receptaculo 115 \times 25, totus fungus usque 500 μ et ultra longo.

Hab. ad alas *Diopsidis* sp. Kamerun, Africa occ. trop.

15. *Stigmatomyces porrectus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 737. — Longiusculus, ambitu irregularis; cellula basali receptaculi obconica, leniter flavido tincta, subbasali omnino hyalina, abrupte angustata, plerumque distincte breviori, subisodiametrica; cellula pedicellari appendicum parvula, subirregulari duplo circ. longiore quam latiore, infra hyalina supra flavescenti v. flavo-brunnescenti; cellula basali appendicum obscuriori, magis lata quam longa sterili, subbasali concolori, minuta depressa subtrigona, duobus antheridiis praedita; basi appendicum ad angulum acutum (45°) divergenti; cellula pedicellari perithecii lata, omnino hyalina, ultra insertionem appendicum, elongata, cellula secundaria subtrigona; ventre subasymmetrico ad basim inflato, in parte distali acutato, cellulis parietalibus spiraliter dispositis, apice parum expanso; perithecio 125-155 \times 35-42, sporis circ. 24 \times 2-5, appendi-

cibus 52-60 \times 15, receptaculo 85-140 \times 20-24, totus fungus 250-350 μ long.

Hab. ad alas et abdominem *Diopsidis* sp. (Dipt.), Kamerun, Africa occ. trop.

16. *Stigmatomyces schwabianus* Thaxter, Proc. Amer. Ac. of Sc. 53., 3785

1918, p. 738. — Undique sordide flavescens; receptaculo parvo, curvulo, cellula basali infra acutata, subbasali parum breviori et latiori; cellula pedicellari appendicum in parte distali parum prominenti, appendicibus suberectis leniter incurvatis; antheridiis regulariter seriatim superpositis, cellula basali lata, obscuriori, sterili vix longiori quam latiori, subbasali parva subtrigona, cellulis caeteris 61 axialibus duobus antheridiis praeditis; ventre plus minus inflato, cellulis parietalibus subanulatim dispositis, collo aegre distinguendo sed in parte distali constricto, curvato; perithecio 175-280 \times 30-42, sporis circ. 40 \times 5, appendicibus 65-80 \times 12-14, receptaculo 60-90 \times 21-24, totus fungus 250-400 μ long.

Hab. ad crura et ad basim alarum *Diopsidis* sp., Kamerun, Africa occ. trop. — Proxima *St. Diopsidi* et *porrecti*.

17. *Stigmatomyces chilensis* Thaxt., Proc. Amer. Acad. 1917, p. 685. 3786

Hab. in artubus et abdomine *Discocerinae* sp. (Dipt.), Concepcion, Chili. — Sporidia 30 \times 3; perith. 130-160 \times 55-64 \times 35-42; appendix 52-60 \times 18; recept. 90-140; long. total. 250-300, raro usque 400 μ .

18. *Stigmatomyces Discocerinae* Thaxt., Proc. Amer. Acad. 1917, p. 687. 3787

Hab. in artubus et thorace *Discocerinae* sp. in Jamaica et Trinidad. — Sporidia 30 \times 3; perith. 95-105 \times 30-35; appendix 30 \times 12; recept. 35-55 \times 12-15; long. tot. ad apicem perith. 125-175 μ .

19. *Stigmatomyces caribbeus* Thaxt., Proc. Amer. Acad. 1917, p. 688. 3788

Hab. in abdomine speciei *Discocerinae*, Panama et Jamaica. — Sporidia 30 \times 3; perith. 122-140, venter 70 \times 32, rostr. 65-70 \times 10-12; append. 40-50 μ ; recept. 70-100 \times 15-20; long. tot. ad apicem perith. 210-265 μ .

20. *Stigmatomyces ventricosus* Thaxter, Proc. Amer. Ac. of Sc. 53., 3789

1918, p. 743. — Breviusculus et crassiusculus; receptaculo hyalino, cellula basilari infra plerumque parum curvata et e pede acutata, subbasali multo minori, plerumque magis lata quam longa; axe appendicum e cellulis 4 sensim minoribus efformato, quarta minori unum antheridium gerenti, duobus superpositis superiori spinosa, omnibus aliis duo antheridia gerentibus; ventre obscuro brunneo-succineo, brevi crasso parum divergenti; peritheciis 75-85 μ ,

sporis 30×3 , ventre $42-48 \times 30-36$, appendicibus $45-50 \times 10$, receptaculo 42×18 , totus fungus $120-140 \mu$ long.

Hab. in abdomine speciei gen. affinis *Discocerinae*, Kamerun, Africa occ. trop. — *St. Discocerinae* proxima sed ventre inflato omnino diversa.

21. *Stigmatomyces subinflatus* Thaxter, Proc. Am. Ac. of Sc. 53., 1918, 3790 p. 739. — Rectus v. axis receptaculi leniter curvatus, pallide flavus; receptaculo subhyalino, cellula basilari et pedicellari appendicum et parte inflata infra apice rubrido tinctis: cellula basilari receptaculi duplo longiori quam basilari; cellula pedicellari appendicum duplo longiore quam latiore, leniter rubrida, margine externo recto v. leniter convexo; axe appendicum caeterum tricellulare, omnibus antheridium solitarium gerentibus; ventre longiusculo et angusto symmetrice inflato spiraliter cristato, perithecio sub apice abrupte inflato; perithecio $110-120 \times 28-30$, sporis $18 \times 2-5$, ventre 68μ , appendicibus 35×9 , receptaculo $45-55 \times 16$, totus fungus $150-175 \mu$, longo.

Hab. ad crura anteriora *Drosophilæ* sp. (Dipter.), Kamerun Africa occ. trop.

22. *Stigmatomyces varians* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3791 p. 740. — Symmetrice subsigmoideus; perithecio eximie elongato, partibus supra receptaculum positis pallidis, fere flavo-citrinis cellulis duobus inferioribus appendicum cellulam basalem divisam simulantibus, inferiori sterili, superioribus duo, tertia unum tantum antheridia gerentibus; appendicibus erectis v. quamvis leniter divergentibus; axe receptaculi et ventris coincidenti recto; ventre magnitudine et forma variabili, collo crasso curvato et e basi lata leniter acutato v. magis angustato, basi constricto et in parte distali parum expanso; perithecio $120-140 \times 30-35$, sporis 35×4 , receptaculo $45-55 \times 20-26$, appendicibus $42-45 \times 8-10$, totus fungus $190-225 \mu$ long.

Hab. in abdomine speciei ignotae *Drosophilidarum*, Kamerun Africa occ. trop. — A typo *S. Sigalloessae*, *Scaptomyzae*, *Drosophilæ* spectans sed maxime variabilis et tunc aegre diagnosticandum.

23. *Stigmatomyces grenadinus* Thaxt., Proc. Am. Acad. 1917, p. 662. 3792

Hab. in artubus *Limosinae ferrugineae* (Dipt.), Grand Etang Grenada. — Sporidia 18×3 ; perith. $85-100 \mu$, venter $35-38 \times 24-28$, rostrum $35-38 \times 11$, apex 18μ ; appendix 35μ ; recept. $50-70 \times 14$; long. tot. ad apicem perithecii $150-185$.

24. *Stigmatomyces proliferans* Thaxter, Proc. Amer. Ac. of Sc. 53., 3793

1918, p. 733. — Rectus gracilis, pallide flavus praecipue venter; receptaculo hyalino, basi appendicum succineo-brunneo tincto; receptaculo dimidium circ. totius fungi longo; cellula pedicellari appendicum longiore quam crassiore, axe appendicum plerumque ex 7 cellulis oblique superpositis sensim minoribus efformato, omnibus terminali excepta, antheridiferis, antheridiis angustis oblique insertis ventre et collo aegre distinguendis, cellulis ultimis superioribus ramulos angustis dichotomos coralloides apice inflatos gelatinosos efformantibus; cellulis pedicellaribus perithecii longioribus quam crassioribus, lateraliter laciniatis, subaequalibus; perithecio erecto, angustulo, parte distali parum longiore quam ventre leniter inflato, collo non abrupte distincto, ventre et collo spiraliter dextrorse ornatis. Peritheciiis 140×30 (ventre) $\times 14$ (collo), sporis $30 \times 3,6$, appendicibus $50-55 \mu$, usque ad apicem ramulorum $70-80 \mu$, receptaculo $120-140 \times 18$; totus fungus $280-315 \mu$ long.

Hab. ad thoracem *Limosinae punctipennis* (Dipter.), Kamerun Africae occ. trop.

25. *Stigmatomyces platystoma* Thaxter, Proc. Amer. Ac. of Sc. 53., 3794

1918, p. 732. — Totus plus minus curvatus v. tantum ad apicem; receptaculo hyalino; axe appendicum plerumque ex 7 cell. efformato basali et subbasali subaequalibus obscurioribus, caeteris sensim minoribus, omnibus convexis septis obliquis praeditis, quatuor inferioribus duo antheridia interne posita gerentibus; cellulis duobus pedicellaribus longioribus quam crassioribus, ventre e basi angustata conoideo, in parte distali duplo latiore, apice lato abrupte distincto parum inflato; peritheciiis $85-100$, sporis $30 \times 3,5$, venter $45-55 \times 30$ 32 , basi 16μ lato, apice circ. 20×12 , appendicibus $55-65$, receptaculo $42-44 \times 15$, totus fungus $155-160 \mu$ long.

Hab. ad crura *Limosinae punctipennis*, Kamerun Africa occ. trop. — *St. prolifero* proxima species.

26. *Stigmatomyces Limosinoides* Thaxter, Proc. Amer. Ac. of Sc. 53., 3795

1918, p. 730. — Subhyalinus v. flavescens, leniter sigmoideus, perithecium brunneo-flavescens; receptaculo infra curvato longiusculo; cellula pedicellari appendicum duplo et ultra longiore quam latiore, cellulam pedicello perithecii etiam superante; axe appendicum angustato 6-8 cellulis efformato, basali parva brevi, pallide succineo-brunnea, caeteris rotundatis, apicem versus sensim minoribus; ventre perithecii flavido-brunneo, fere symmetrico, subellipsoideo, crasse tunicato, erecto v. leniter interiori parte reclinato;

collo lato ventris longiore, apice brevi quandoque leniter inflato, vertice subtruncato infra abrupte compresso; perithecio 100-125 \times 35-42, sporis 25 \times 3,5, receptaculo 100-130 \times 18-22, appendicibus 50-60 μ , totus fungus 225-300 μ long.

Hab. ad crura posteriora *Limosinae punctipennis*, [Dipt.], Sarawak Borneo. — *St. papuano* Thaxt. valde affinis et verisimiliter varietas ejusdem.

27. *Stigmatomyces distortus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3796 p. 728. — Distincte curvatus, hyalinus dein pallide flavido tinctus, ventre obscure brunneo-flavo, appendicibus infra pallide brunnescentibus, e basi oblique dispositis, e cellulis quatuor persistentibus efformatis, inferioribus sublatioribus, subaequalibus brunneis, e cellulis duobus parvis evanescentibus terminatis (? antheridiis); perithecii apice partibus indistinctis terminato sed prominentia breviter rotundato-digitiformi producto; peritheciis 85-100 \times 26-28, projectione ejusdem 10 \times 5, sporis 24 \times 3,5, receptaculo 40-50 \times 14, appendicibus circ. 50 μ , totus fungus 150 μ long.

Hab. ad capitem *Limosinae punctipennis* [Dipt.], Kamerun, Africa occ. trop.

28. *Stigmatomyces tortimasculus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 734. — Brevis crassus v. plus minus elongatus gracilis, subhyalinus, ventre perithecii pallide brunneo-flavo excepto; receptaculo varie elongato, e basi angustato curvato; axe appendicum subirregulari, curvo, quinquecellulari, terminali minuta obtuse mucroniformi, omnibus duo antheridia gerentibus, collo antheridiorum longo, varie curvato et irregulariter divergenti; ventre perithecii variabile, latiusculo, brevi et abrupte inflato, collo crasso et leniter angustato, apice parum distincto variabili; perithecio 88-100 \times 32 v. usque 120 \times 35, sporis 20 \times 3,5, receptaculo 42-75 \times 12-14, v. usque 130 \times 14, appendicibus circ. 35 μ longis, totus fungus 150-200 μ v. usque 275 μ long.

Hab. in *Limosinae* spec., exemplaribus majoribus in thorace, minoribus ad crura, Sarawak Borneo.

29. *Stigmatomyces laticollis* Thaxter, Proc. Am. Ac. of Sc., 53., 1918, 3798 p. 729. — Subhyalinus, receptaculo breviusculo, cellulis subaequalibus septo obliquo separatis, basali infra angustata, cellula pedicellari appendicum parum latiori cellulae pedicell. perithecii cui approximata; axe appendicum 6-9 cellulis circiter efformato, basali parva brunnea, depressa parte distali latiore; cellula pedicellari perithecii e cellula appendicum parum superata; ventre asym-

metrico, in parte distali latiore; parte distali perithecii indifferentiata, valida, diametro undique subaequali, apice late rotundato extus incurvato; peritheciiis 100-105 \times 28-32 (ventre) \times 14 (parte distali); sporis circ. 18 \times 2,5; appendicibus circ. 40-50 μ , receptaculo 40-50 μ , totus fungus 150-175 μ long.

Hab. in abdomine *Limosinae* sp. (Dipt.), Kamerun Africa occ. trop. — *St. affini* ventris conformatione proxima, sed differt regione cellulae basali longiori, et parte distali uniformiter crassa, et apice late rotundato obtuse curvato.

30. *Stigmatomyces longicollis* Thaxt., Proc. Am. Acad. 1917, p. 660. 3799

Hab. in artubus poster. et abdomine *Limosinae* sp., Balaclava, Clarkstown Jamaica. — Sporidia 18-20 \times 2,5; perith. 245-450 μ venter 56 \times 35-36 \times 26-30; rostrum 190-380 \times 14; apex 22; appendix 90-120 μ ; recept. 40-45 \times 18-20; long. tot. ad apicem perithecii 300-525 μ .

31. *Stigmatomyces crassicollis* Thaxt., Proc. Am. Acad. 1917, p. 661. 3800

Hab. in abdomine et artubus *Limosinae* sp., Balaclava, Mandeville Jamaica. — Sporidia 20-22 \times 2; perith. 140-325 μ , venter 35-60 \times 38-64; rostrum 350 \times 25, apex 18 μ ; appendix 35-70; recept. 50-70 \times 22-35; long. tot. ad apicem perithecii 200-430 μ .

32. *Stigmatomyces affinis* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3801 p. 723. —

Infra hyalinus, infra cellula pedicellari pallide flavidus; habitu rigido, recto v. curvulo, receptaculo basim versus conoideo-attenuato, cellula basali aliquanto longiore, pede parvo, supra brunneo-fumoso; cellula pedicellari perithecii et appendicum e latere horizontaliter dispositis subaequalibus, secundaria statura minori sed parum longiore; axe appendicum extus convexo plerumque 8-cellulari; ventre perithecii crassiusculo infra medio plus v. minus abrupte inflato, supra quadrilobulato apice papillato; peritheciiis 95-105 \times 28-32, sporis circ. 25 \times 3,5, appendicibus circ. 50 μ long., receptaculo 35-50 \times 16, totus fungus 150-175 μ long.

Hab. in *Limosinae* sp. [Dipt.], Kamerun Africa occ. trop. — *St. papuano* proximus, sed differt caracteribus perithecii et situ cellulae pedicellaris.

33. *Stigmatomyces platensis* Speg., Laboulb. Arg. p. 676, fig. 208. — 3802

Parvus, totus hyalinus; cellula basali obconica subbasali tumida brevior, androsticho breviter pedicellato 10-12-antheridiifero, antheridiis inferis fumosis majoribus, ceteris hyalinis cito minoribus; perithecio gynostico 3-cellulari, pedicello androstichi adnato, imposito, sublageniformi, parte sporifera ovato-tetragona sursum abrupte

valideque contracta grosse 4-gibbosa, rostro ostiolari subcylindrico, leniter arcuato, ostiolo conico angustiore, ore obliquo acuto donato, coronata.

Hab. in alis et abdomine muscae parvulae, *Limosinae* sp., La Plata Argent. — Perith. sine ped. 75-80 \times 20-22; recept. 50-55 \times 20; alt. tot. 140-150 μ .

34. *Stigmatomyces papuanus* Thaxt., Syll. XVI p. 681. — *Stigm. italicus* Speg. 1915. — var. *lelostoma* R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 17, fig. 4. — A typo differt perithecio apice levi obtuso, appendice mascula ad septa omnia constricto. 3803

Hab. in *Leptocera* (*Limosina*) *fontinalis* Fall. [Dipt.], Djurdjura or. prope Tizi-n-Kouilae, Algeria Africa bor.

35. *Stigmatomyces excavatus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 742. — Erectus v. leniter sigmoideus; appendicibus longis, gracilibus, attenuatis, plerumque rectis cum antheridiis extus positus v. quandoque lateralibus; receptaculo crasso tunicato, brevi crasso; cellula pedicellari appendicem lata, circa cellulam basalem prominentiam rotundatam efformanti; perithecio gracili acuminato, ventre triplo v. quadruplo longiore quam latiore; perithecio 140-200 \times 20-28, sporis circ. 25 \times 3, regione basali et pedicellari 35 \times 22, receptaculo. 80 \times 25, appendicibus 70-95 \times 7, eorum cellula pedicellari 35-45 \times 10-15, totus fungus 280-335 μ long. 3804

Hab. in abdomine speciei gen. *Notiphilae* affinis [Dipt.], Kamerun Africa occ. trop.

36. *Stigmatomyces Notiphilae* Thaxt., Proc. Amer. Acad. 1917, p. 662. 3805

Hab. in abdomine et artubus *Notophila* e, Balaclava, Jamaica et Grenada. — Sporidia 36 \times 4,5; perith. 185-200 \times 30-35; cell. bas. 30-40 \times 26-28; recept. 70 \times 25; long. tot. 325-400 μ ; appendix 65-75 \times 10.

37. *Stigmatomyces ortalidanus* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 744. — Longus et gracilis, rectus v. curvulus; cellula basali receptaculi acutata infra curvula crassitudine secundaria tegumentum demum brunneo nigrescenti et crassitudine primaria flavescenti; appendicibus longis, angustis et in parte distali attenuatis 8-10 cellulis axialibus efformatis; ventre perithecii demum flavo-brunnescenti triplo et ultra longiore quam latiore, recto subsymetrico; venis colli et ventris saepe conspicuis corrugatis quandoque aegre visibilibus sed aetate majoribus; regione basali et pedicellari perithecii 109-210 \times 30-35, ventre 90 \times 105 \times 30-38, collo 3806

122 \times 20-28 v. minus, apice 25-30 \times 12, sporis circ. 45 \times 4, appendicibus 106-125 μ long. basi 15 μ cr., cellula pedicellari 50-60 \times 14-18, receptaculo 250-280 \times 32, totus fungus usque 740 \times 35-40.

Hab. in abdomine *Ortalidae* arum sp. (Dipt.), Kamerun Africa occ. trop.

38. **Stigmatomyces inflatus** Thaxt., Proc. Amer. Acad. 1917, p. 664. 3807

Hab. in superf. sup. abdominis *Sapromyzae* sp., Orizaba Mexico (MANN). — Sporidia 18 \times 3,5; perith. basis et pes 54-62 \times 18-23, venter 55-62 \times 38-45; rostrum 90-110 \times 15, apex 26-30 \times 15; appendix 55-62 μ ; recept. 100-120 \times 18; long. total. ad apicem perith. 310-390.

39. **Stigmatomyces hexandrus** Thaxter, Proc. Amer. Ac. of Sc. 53., 3808

1918, p. 746. — Habitus rigidus erectus; receptaculo hyalino recto v. curvulo, cellula basali dimidium subbasali longiore; axe appendicum tricellulari, inferioribus antheridia bina tertia unum tantum gerentibus, antheridium sextum terminali uno latere characteristicè inflato spinoso; superficie ventralis minute et vix conspicue granulosa, collo ventris longiore medio leniter constricto; perithecio 120-190 \times 24-28, sporis 28-30 \times 3,5, appendicibus 55 \times 10, receptaculo 120-190 \times 24-28, totus fungus usque 280-300 long. vel etiam 370 \times 42.

Hab. ad crura et abdomen *Trypetidae* arum sp. [Dipt.], Kamerun Africa occ. trop. — *S. separato* valde affinis.

40. **Stigmatomyces separatus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3809

p. 747. — Habitus rigidus erectus, collo et apice leniter incurvato; receptaculo hyalino, subsodiametrico, v. leniter ad apicem acutato; cellula pedicellari appendicum leniter subbasalis latiori, circiter duplo latiori quam longiori, axe quinquecellulari, duobus inferioribus plerumque tria antheridia tertia et quarta duo, quinta unum tantum gerentibus; cellula pedicellari perithecii tantum longa quam lata, basali subaequali, ventre recto infra leniter et symmetricè inflato, superficie leniter granulosa, collo subaequilongo leniter angustato vel subsodiametrico, apice aegre distinguibili; perithecio 155-176 \times 28-35, sporis 30 \times 3,5, appendicibus 50-65 \times 7, receptaculo 70-80 \times 18-20, totus fungus 210-280 μ long.

Hab. in capite *Trypetidae* arum sp. [Dipt.], Kamerun Africa occ. trop.

41. **Stigmatomyces Euconni** Picard, Bull. Scient. France Belgique t. 3810

50., 1916-1917, p. 447, tab. VI fig. 4. — Hyalina sed perithecia et antheridia brunneo-rubrescentia; receptaculo parum manifesto e duo-

bus cellulis parvis omnino hyalinis efformato, subbasali apice pedunculum peritheci e latere appendicem gerentem; pedunculo peritheci tenui elongatissimo; perithecio fusoido-inflato. 125-135 μ longo; appendice (70-75 μ longa) 3 antheridia gerente, pedunculo brevi rotundato pallide rubescenti ad receptaculum lateraliter inserto, apice cellulis tribus constituto, omnibus antheridium singulum ovoideum gerentibus, antheridio terminali lateraliter spinulifero. Totus fungus 220-230 μ long.

Hab. ad crura *Eucanni Wetterhali* (Coleopt.), Latres (Herault), Gallia (LAVAGNE).

42. *Stigmatomyces Aciuræ* Thaxt., Proc. Amer. Acad. 1917, p. 668. 3811

Hab. in artubus et abdomine *Aciuræ* sp. et *Eusinae* sp., Mandeville, Jamaica. — Sporidia 50-55 \times 4,5; perith. 64-70 \times 78, rostr. 55-75 \times 24, appendix 55 \times 18, cell. bas. 20 \times 12, pes 35 \times 12; recept. 150-350 \times 18-27., long. tot. ad apicem perith. 330-550 μ .

43. *Stigmatomyces Anoplischii* Thaxt., Proc. Amer. Acad. 1912 p. 176, 3812
Speg. Lab. Arg. fig. 204.

Hab. in elytris *Anoplischii* sp., Buenos Aires et La Plata Argent. et *Diarterii pullati*, Montevideo, Buenos Aires, Sta Catalina et La Plata, Arg. (SPEGGAZZINI). — Sporidia 60-65 \times 8; perith., incluso pede (8 μ), 280-330 \times 45; appendix, sine pede, 50-60 \times 25; antherid. 25 \times 12; recept. incl. cell. pedunc. appendicis 50-55 \times 26; longit. tot. ad apicem perith. 310-390 μ ad apicem appendicis 130 μ .

44. *Stigmatomyces Clinoceræ* Thaxt., Proc. Am. Acad. 1917, p. 659. 3813

Hab. in abdomine infer. *Clinoceræ binolatae*, Tecoma Washington Amer. bor. — Sporidia 18 \times 2,8; perith. 140-170 \times 30-36; appendix longior 76 \times 8-10; receptac. 60-88 \times 14-18; long. tot. ad apicem peritheci 260-300.

45. *Stigmatomyces Diapetis* Thaxt., Proc. Am. Acad. 1917, p. 657. 3814

Hab. in *Diapetis* sp., Mandeville, Jamaica, Panama, Trinidad. — Sporidia 38-40 \times 3,5; perith. 120-150 μ ; venter 50-60 \times 35-50; appendix 50-70 \times 20; recept. 70-90 \times 17-20; long. tot. 280-300 μ .

46. *Stigmatomyces Eusinae* Thaxt., Proc. Amer. Acad. 1917, p. 665. 3815

Hab. in variis partibus *Eusinae* sp., Mandeville, Jamaica. — Sporidia 27 \times 3,6; peritheci pes et pars basil. 60-70 \times 35, venter 75-100 \times 50-55, rostr. 46-60 \times 18-20, apex 15 \times 18-20; appendix 80-55 \times 12,5; recept. 80-150 \times 20; long. tot. ad apicem peritheci 300-400 μ .

47. *Stigmatomyces verruculosus* Thaxt., Proc. Am. Acad. 1917, p. 667. 3816
Hab. in abdomine *Eusinae* sp., Mandeville Jamaica et Grenada. — Sporidia 28×4 ; perith. 35×32 , venter $48-55 \times 40$, rostrum $62-75 \times 18$, apex $19-21 \times 14$; appendix 60μ , cell. basil. $21 \times 7,5$, pes $27 \times 10,5$; long. tot. ad apicem peritheci $280-312 \mu$.
48. *Stigmatomyces arophilus* Speg., Laboulb. Arg. p. 677, fig. 209. — 3817
 Parvulus receptaculo fumoso, cellula basali triangulari, subbasali anguste segmentiformi, pedicello peritheciali brevi, perithecio subcylindraco recto apice abruptiuscule in ostiolo cylindrico infuscato leniter incurvato oreque subtruncato producto; appendice erecta simplice subgracili 5-6-mera, articulis 1-4 superis monantheridiatis.
Hab. pervulgatus in abdomine *Heterotopis formicetorum* in nidis *Attae Lundii*, Sta Catalina B. A. Florencio Varela et La Plata, Arg. — Perithec. c. ped. $80-85 \times 15-18$; app. $25-50 \times 5-8$; alt. tot. $100-120 \mu$.
49. *Stigmatomyces montevidensis* Speg., Laboulb. Arg. p. 675, fig. 207. — 3818
 Majusculus; cellulis receptaculi angustis, elongatis vix fumosis; androsticho 6-7-mero infuscato, ventre antheridiorum paria 5 fulcente; perithecio lanceolato-fusoideo obsolete subtoruloso subhyalino, basi fuscescete, pedicello angusto longiuscule fulto.
Hab. in abdomine *Latrobii dimidiati*, Montevideo — Perith. $185-200 \times 36-38$; recept. $125-130 \times 15-18$; alt. tot. $350-360 \mu$.
50. *Stigmatomyces curvirostris* Thaxt., Proc. Amer. Acad. 1917, p. 671. 3819
Hab. ad apicem abdominis *Paralimnae ciliatae*, Balclava, Mandeville et Clarkstown Jamaica. — Sporidia $28 \times 2,5$; perith. $195-225 \times 30$; appendix $80-90$, pes $100-118 \times 12$; recept. $58-70 \times 15$; long. tot. ad apicem perith. $300-390 \times 30-40$.
51. *Stigmatomyces rostratus* Thaxt., Proc. Amer. Acad. 1917, p. 672. 3820
Hab. in abdomine *Paralimnae decipientis* in Jamaica et Grenada. — Sporidia 28×3 , peritheci venter $100-115 \times 35-45$, rostrum $90-100 \times 16-18$; recept. $80-95 \times 22-26$; appendix $75-85$, pes 35×16 , cell. basil. $28-30 \mu$, long. tot. ad apicem peritheci $300-350 \mu$.
52. *Stigmatomyces Paralimnae* Thaxt., Proc. Amer. Acad. 1917, p. 674. 3821
Hab. in abdomine, artubus et alis *Paralimnae ciliatae*, Arkansas Jamaica et Grenada. — Sporidia 35×4 ; perith. venter $60-75 \times 22-28$; long. a pede ad basim ventris $50-70 \times 22-30$; appendix $40-45$; long. tot. ad apicem peritheci $150-175 \mu$.
53. *Stigmatomyces jamaicensis* Thaxt., Proc. Am. Acad. 1917, p. 676. 3822

- Hab. in alis et artubus Paralimnae ciliatae*, Jamaica. — Sporidia 30×4 ; perith. $80-115 \times 28$; appendix $60-75 \times 12$, pes $30-50 \times 10-12$, cell. basil. $8-10 \mu$; recept. $38-46 \times 15-18$; long. tot. ad apicem perith. $135-195 \mu$.
- 54 *Stigmatomyces brevicollis* Thaxt., Proc. Am. Acad. 1917, p. 677. 3823
Hab. in capite, thorace et artubus Psilopae sp., Balaclava Jamaica. — Sporidia $35 \times 3,5$; perith. $85-95 \mu$ venter $55-64 \times 28-34$, rostr. 18μ , appendix $50-52 \times 8$; recept. $42-54 \times 14-16$; long. tot. ad apicem perith. $140-170 \mu$.
55. *Stigmatomyces indentatus* Thaxt., Proc. Amer. Acad. 1917, p. 678. 3824
Hab. in superf. super. abdominis Psilopae sp., Arkansas, Orizaba Mexico. — Sporidia 24×4 ; perith. $130-147$, venter $70-77 \times 35-42$; recept. $85-125 \times 22$; appendix 42 ; long. tot. ad apicem peritheci $210-315 \mu$.
56. *Stigmatomyces Ochtheroideae* Thaxt., Proc. Amer. Acad. 1917, p. 679. 3825
Hab. in superf. sup. thoracis Ochtheroideae spp., Trinidad, Panama (ROVER), Grenada. — Sporidia 36×4 ; perith. $100-110 \times 30-35$; appendix $45-50 \times 16$; receptaculum $55-65 \times 14-16$; long. tot. ad apicem perith. $150-175 \mu$.
57. *Stigmatomyces compressus* Thaxt., Proc. Am. Acad. 1917, p. 681. 3826
Hab. in artubus et alis Psilopae sp., Mandeville, Balaclava Jamaica et *Ochtheroideae glaphropodae*, Mandeville et Porus Jamaica. — Sporidia $30 \times 3,8$; perith. $120-140 \times 38-42$; appendix 55μ ; recept. $70-100 \times 16-20$; long. tot. ad apicem peritheci $220-310$.
58. *Stigmatomyces micrandus* Thaxt., Monogr. Lab. II p., t. 46 fig 24— 3827
var. *Atissae* Thaxt., Proc. Am. Acad. 1917, p. 682. — A typo differt statura minore, $180-200 \mu$ long. — *Hab. in capite, thorace, antennisque minutae, atrae speciei Atissae in India occid.*
59. *Stigmatomyces Psilopae* Thaxt., Proc. Amer. Acad. 1917, p. 682. 3828
Hab. in insecto Psilopae sp. in Jamaicae plur. loc. et Grenada. — Sporidia $35 \times 3,5$; perith. venter $85 \times 42-62$, rostrum $70-140 \times 18$; recept. $78-260 \times 20-25$; appendix 52×14 ; longit. tot. ad apicem perith. $300-540$.
- 60 *Stigmatomyces Ilytheae* Thaxt., Proc. Amer. Acad. 1917, p. 683. 3829
Hab. in thorace, artubus anterior. Ilytheae spp. in Jamaica, Grenada, Kamerun, Borneo et Maine, in formis variis — In typo: sporidia $35 \times 3,5$; perith. $155-192 \mu$, venter $70-98 \times 28-42$; appendix 56×16 ; recept. $100-110 \times 30$; long. tot. ad apicem peritheci $210-300 \mu$.

61. *Stigmatomyces ambiguus* Thaxt., Proc. Amer. Acad. 1917, p. 689. 3830
Hab. in alis *Ochtheroideae*, Grenada et Venezuela. — Sporidia $35 \times 3,5$; perith. 140-155, venter 60-70 \times 30-32; recept. 88-105 \times 21; appendix 60 \times 15; long. tot. ad apicem perith. 220-280.
62. *Stigmatomyces Ochtherae* Thaxt., Proc. Amer. Acad. 1917, p. 691. 3831
Hab. in superf. sup. abdominis *Ochtherae*, Balaclava Jamaica. — Sporidia $35 \times 3,5$; perith. 100 \times 31-35; appendix 70-85 \times 15-20; recept 66-85 \times 18-25; long. tot. ad apicem perith. 160-180 μ .
63. *Stigmatomyces borealis* Thaxt., Proc. Amer. Acad. 1917, p. 692. 3832
Hab. in artubus *Parydrae imilantis*, Kittery Point, Maine. — Sporidia $34 \times 3,5$; perith. 96-110 \times 30-40; appendix 48 μ ; recept. 60-85 \times 22-24; long. tot. ad apicem peritheci. 150-200 μ .
64. *Stigmatomyces lingulatus* Thaxt., Proc. Amer. Acad. 1917, p. 693. 3833
Hab. in superf. sup. abdominis *Parydrae humilis*, Balaclava, Jamaica. — Sporidia $38 \times 4,5$; perith. venter 70-80 \times 40, long. 90-100 \times 14-18; append. 75-80 \times 12-14; cell. basil. 24 \times 10, pes 30 μ , recept. 115-135 \times 24-28, long. tot. ad apicem perith. 300 μ .
65. *Stigmatomyces pinguis* Thaxt., Proc. Amer. Acad. 1917, p. 694. 3834
Hab. in superf. inf. alae sinistr. *Parydrae pinguis*, Fayetteville Arkansas. — Sporidia 28×4 , peritheci. 120-135 μ , venter 65-78 \times 40-55, rostr. 16 μ cr.; appendix 60 \times 12; recept. 65-98 \times 22-26, long. tot. ad apicem perithecii 200-260.
66. *Stigmatomyces protrudens* Thaxt., Proc. Amer. Acad. 1917, p. 695. 3835
Hab. in thorace, alis et abdom. sup. *Parydrae pinguis*, Fayetteville Arkansas. — Sporidia 30×4 ; perith. 120-140 \times 30-45, ejus processus 16 μ ; receptac. 70-100 \times 20; appendix 65-70 \times 15, pes 25-27 \times 12-14; long. tot. ad apice perith. 225-275.
67. *Stigmatomyces Parydrae* Thaxt., Proc. Amer. Acad. 1917, p. 696. 3836
Hab. in artubus, alis et thorace *Parydrae quadratuberculatae*, Fayetteville, Arkansas. — Sporidia 30×4 ; perith. venter 60-75 \times 35-40, basis et pes 18 \times 27; recept. 45 \times 20-22, long. maxima 80 μ ; appendix 60-70 \times 16; long. tot. ad apicem perithecii 180-225 μ .
68. *Stigmatomyces Sigaloessae* Thaxt., Proc. Amer. Acad. 1917, p. 698. 3837
Hab. in superf. sup. abdominis *Sigaloessae*, Mandeville Jamaica. — Sporidia 28×4 ; perith. basis et pes 18-20 \times 32-35, venter 75-82 \times 42-47, rostr. 66 \times 46-54, appendix 45-50 \times 8-9, pes 16-18 \times 8; recept. 72-156 \times 23-28; long. tot. ad apicem perithecii 225-310 μ .
69. *Stigmatomyces Leucophengae* Thaxt., Proc. Am. Acad. 1917, p. 699. 3838

Hab. in thorace et abdomine *Leucophengae* sp., Fayetteville Arkansas. — Sporidia $28 \times 3,5$; perith. basis et pes 30×20 , venter $58-65 \times 20-24$; rostrum et apex $23-27 \times 11,5$; appendix $55-60 \times 8$; recept. $26-30 \times 24$; long. tot. ad apicem peritheci $150-210 \times 27$.

70. *Stigmatomyces Streblae* Thaxt., Proc. Amer. Acad. 1917, p. 700. 3839

Hab. in artubus et alis *Streblae vespertilionis* ad vespertiliones, Venezuela (CARRICKER). — Sporidia $28 \times 3,5$; perith. $95-105$, rostr. 35×16 , venter $50-56 \times 24-28$; appendix 28×18 ; recept. $65-80 \times 16-20$, longit. tot. $170-200 \mu$.

71. *Stigmatomyces Nycteribiidarum* Thaxt., Proc. Amer. Acad. 1917, p. 702. 3840

Hab. in abdomine infer. *Nycteribideae* spec. parasiticae in Antibaes Grenadino, Grenada (BORNES). — Perith. $190-215 \mu$ venter $110-120 \times 45-54$, rostr. 70×22 ; appendix $50 \times 20-24$; recept. $85-105 \times 30-35$; long. tot. ad apicem peritheci $330-365 \mu$.

72. *Stigmatomyces Lasiochili* Thaxt., Proc. Amer. Acad. 1917, p. 703. 3841

Hab. in artubus etc. *Lasiochili pallidi*, Grand Etang Grenada. — Sporidia $40-45 \times 3,5$; perith. $135-160 \times 30-35$; appendix $50-55 \mu$; recept. cum pede $30-35 \times 16$; long. tot. ad apicem peritheci $175-210 \mu$.

73. *Stigmatomyces fuscipes* Speg., Laboulb. Arg. p. 675, fig. 206. — 3842

Mediocris, cellulis receptaculi angustis, basali elongata, subbasali brevi, fuscis; androsticho 4-5-mero angusto fusco, ventre paria antheridiorum tria gerente; perithecio subfusoido-lanceolato fere hyalino (basi excepta subolivascens), apice leniter annulatum constricto atque in ostiolo subcylindraceo-conoideo producto, pedicello brevi latiusculo fumoso fulto.

Hab. in abdomine *Scopaei lugubris* in ins. Santiago La Plata. — Perith. sine ped. $140-150 \times 28-30$; recept. $60-65 \times 10-17$; alt. tot. $235-260 \mu$.

74. *Stigmatomyces Stilici* Thaxt., Proc. Amer. Acad. 1915, p. 35. 3843

Hab. in abdomine et elytris *Stilici ceylonensis*, Peradeniya Ceylon. — Perith. $125-195 \times 30-40$, pes $40-60 \times 20-23$; appendix $45-50 \mu$, ejus pes $15-20 \mu$; long. tot. ad apicem peritheci $200-310 \mu$; sporidia 35×4 .

75. *Stigmatomyces Coccinellidae* Thaxt., Proc. Am. Acad. 1917, p. 704. 3844

Hab. in elytris *Coccinellidae* minutae speciei, Grenada (BORNES), Mandeville Balaclava, Jamaica, Mindanao Ins. Philipp., Sarawak Borneo. — Sporidia $45 \times 3,5$; perith. $85-110 \times 24-30$, apex

22 \times 20-18 \times 25; appendix ad apicem term. antheridii 35-40 μ ; antheridia 18 μ ; receptac. 20-25 \times 10-12; long. tot. ad apicem peritheci 120-140 μ .

ILYTHEOMYCES Thaxt., Proc. Amer. Acad. 1917, p. 705 (Etym. a *Ilythea*, genus Dipterorum). — Receptaculum compactum, bicellulare, pes et basis non discreta; cellula subbasilaris apice cellulam peduncularem peritheci et lateraliter appendicem gerens. Appendix constans ex axi cellularum superpositarum numero indefinito; antheridia majuscula, binata, colorata; cellulae terminales axis ramulos complicatos extus intusque gerentes; perithecia normalia, basis et pes bene evoluta, apice varie appendiculigera.

1. *Ilytheomyces elegans* Thaxt., l. c. p. 707.

3845

Hab. in superficie inf. dextera abdominis *Ilythea* sp. (Dipt.), Clarkestown et Balaclava Jamaica, Grenada (BRUES) et Panama (RIVER). — Sporidia 25 \times 2; perithecium 52-75 \times 16-18, ejus appendix 75-140 \times 4-5; appendix 50-80 μ ; recept. 10-14 \times 12-14; long. tot. ad apicem perith. 90-145 μ .

2. *Ilytheomyces sarawakensis* Thaxter, Proc. Amer. Ac. of Sc. 53., 3846

1918, p. 716. — *Ilytheom. eleganti* valde affinis et probabiliter varietas ejusdem tantum sistit. — Totus fungus 100-120 μ long.; peritheciis e basi ascigera 50-75 \times 14-20, sporis circ. 22 \times 2-5, regione basali et pedicellari 20-35 \times 18-22, receptaculo 10 \times 12, appendicibus 50-60 μ long.

Hab. in inferiori parte abdominis *Ilythea* sp., Sarawak Borneo.

3. *Ilytheomyces kamerunensis* Thaxter, Proc. Amer. Ac. of Sc. 53., 3847

1918, p. 715. — Cellula basali latiuscula, omnino hyalina, quadrangulari, ventricosa, subbasali subtrigona, minori subventricosa et uno cum pede nigricanti; appendicibus numerosis, ramulis crassiusculis, antheridiis binis, crassis, rectis, brunneis; cellula pedicellari peritheci parva et angusta, omnino opaca cum regione basilari abnormiter efformata peritheci longiore; cellula pedicellari secundaria infra nigro-marginata; cellulis inferioribus peritheci extus leniter plicatis, perithecia apice obscuriori indistincto abrupte angustato, 63-70 \times 17, sporis 20 \times 2,5; regione cellulae basilaris 90-100 \times 18-20, cellula pedicellari peritheci 8 \times 8, receptaculo 15 μ , appendicibus 56-68, totus fungus 140-175 μ long.

Hab. in inferiori parte abdominis *Ilythea* sp., Kamerun Africae occ. — Proxima *I. sarawakensis* a qua differt caracteribus

cellulae basilaris, perithecii etc.

4. *Ilytheomyces manubriolatus* Thaxt., Proc. Amer. Acad. 1917, p. 708. 3848
Hab. in alis *Ilytheae* sp., Grenada, Jamaica, Trinidad, Panama (ROVEE). — Sporidia 22×2 ; perith. $40-50 \times 13-16$, apex 12μ , appendix ejus $40-60 \times 3$; processus cell. secund. $8-14 \mu$; appendix 30, ramuli longiores 45×5 ; recept. et pes 15; long. tot. ad apicem perithecii $75-85 \mu$.
5. *Ilytheomyces panamensis* Thaxt., Proc. Amer. Acad. 1917, p. 710. 3849
Hab. in superf. sup. alae sinistr. *Ilytheae* spec., Bocas del Toro Panama. — Sporidia $28 \times 2,5$; perith. $36-40 \times 14$, pars basalis $12-13,5 \times 12$; appendicis axis 20μ , ramuli longiores 28μ , antheridia $12 \times 3,5$, protrusio e cellula subbasil. receptaculi 18×7 ; long. tot. ad apicem perith. $58-68 \mu$.
6. *Ilytheomyces minusculus* Thaxt., Proc. Amer. Acad. 1917, p. 711. 3850
Hab. in ala dext. *Ilytheae* sp., Clarkstown Jamaica. — Sporidia 22×2 ; perith. $48-50 \times 15$, pes $9 \times 7,5$, pars super. hyal. 18×14 , processus term. 15×5 ; appendicis axis 30μ ; ramuli longiores 35μ , antheridia. 12μ ; long. tot. ad apicem perithecii $70-90$.
7. *Ilytheomyces lingulatus* Thaxt., Proc. Amer. Acad. 1917, p. 712. 3851
Hab. in ala dext. *Ilytheae* sp., Grenada, Jamaica, Trinidad, Panama (ROVEE). — Sporidia 35×3 ; perith. $35 \times 14-17$, processus linguiformis $16-18 \times 5$, pars libera $9-10 \mu$; appendicis axis ater $25-30 \mu$, ramuli longiores $35 \times 3,5$; antheridia 18; long. tot. ad apicem perithecii $55-65 \mu$.
8. *Ilytheomyces major* Thaxt., Proc. Amer. Acad. 1917, p. 713. 3852
Hab. in ala sinistra *Ilytheae*, Bocas del Toro Panama. — Sporidia 45×3 ; perith. $58-68 \times 18$, processus linguiformis 18×8 ; basis 25×10 ; appendix axis 35μ , ramuli longiores $55 \times 5-6$; antheridia $12 \times 4,5$; long. tot. ad apicem perithecii $90-110$.
9. *Ilytheomyces calycinus* Thaxt., Proc. Amer. Acad. 1917, p. 714. 3853
Hab. superf. superiori alae sinistrae *Ilytheae* sp., Battersea et Clarkstown Jamaica. — Sporidia $25 \times 2,5$; perith. $60-68 \times 17-20$, apex $15-17 \times 15-17$, pes et basis 18×12 ; appendicis axis $25-35 \mu$, ramulus longior 20μ ; antheridia 14μ ; long. tot. ad apicem perith. $90-110 \mu$.
10. *Ilytheomyces falcatus* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3854 p. 714. — Plus minus conspicue curvatus. Cellula basali infra insertionem appendicum abrupte prominenti, cellula subbasali latiori hyalina; axe appendicum divergens e cellulis 4 vel 5 vix visibilibus extus nigricantibus efformato; cellula subbasali abrupte la-

tiori quam basali interiori parte cellulis androphori gerenti, caeteris cellulis axialibus extus brunneo-nigricantibus extus curvis; cellula pedicellari peritheci hyalina, breviuscula; superficie peritheci brunneo-purpurascenti granuloso-maculata, apice leniter obscuriori; perithecio $55-68 \times 15-18$, regione pedicellari et basali 35.50×15 , sporis circ. $25 \times 2,5$; appendicibus 50μ circ. long. ramulis longioribus $40 \times 6,5$, totus fungus $100-120 \mu$ long.

Hab. in superiori parte abdominis *Ilytheae* sp., Kamerun Africa occ. — *I. majori* proxima, sed differt perithecio punctato apice prominenti-incurvato.

11. *Ilytheomyces obtusus* Thaxt., Proc. Amer. Acad. 1917, p. 715. 3855

Hab. ad basim alarum *Ilytheae* sp., Clarkstown Jamaica. — Sporidia $30 \times 2,5$; perith. $48 \times 18-20$; appendicis axis 30μ , ramulus longior 35 ; cell. subbasil. $6-7 \mu$; long. tot. ad apicem peritheci 80μ .

12. *Ilytheomyces anomalus* Thaxt., Proc. Amer. Acad. 1917, p. 716. 3856

Hab. in artu poster. *Ilytheae*, Clarkstown, Jamaica. — Sporidia $28 \times 2,8$; perith. $50 \times 16 \times 24$, pes et cell. basil. $32-60 \times 13-17$; recept. incl. pede 28μ , axis appendicis 50μ ; antheridia 16μ ; long. tot. ad apicem perith. $100-140 \mu$.

13. *Ilytheomyces simplex* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 718. 3857

— Perithecium et appendices obscure brunneae. Cellula basali receptaculi pede conjuncta, minuta, aegre perspicua margine superiori hyalino excepto; appendicibus crassis subclavatis, apice ramis brevibus abortivis praeditis, axe e quinque cellulis subinaequalibus efformato; cellula pedicellari peritheci brevi et crassa, hyalina, cellula basali hyalina v. supra brunneo tineta, cellula pedicellari secundaria extus prominula; perithecio obscure brunneo, asymmetrico infra inflato, apice abrupte leniterque angustato, pallidiori, 60×18 , sporis 15×2 , appendicibus 35×8 , totus fungus $90-97 \mu$ long.

Hab. ad crura *Ilytheae* sp., Sarawak Borneo. — *I. anomalus* valde affinis sed statura minori et characteribus appendicum et perithecorum diversus.

TERATOMYCES Thaxt. — Syll. XI p. 454, XIV p. 735, XVI p. 690, XXI p. 4 et 12.

Teratomyces atropurpureus R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 20, tab. II fig. 13-17. — Receptaculo tricellulari; cellula basali supra unguem nigrum subhyalina;

cellula subbasali, obeonica, apice nigricanti; cellula distali latissima, obeonica, inferne nigricanti, superne subhyalina v. dilute fusco-purpurea; septo superiore intense fusco-purpureo, cellularum appendiceiferarum coronarum et peritheci pedicellum gerenti; appendicibus masculis eis *T. Actobii* simillimis, sed usque ad apicem fusco-purpureo-septatis, adultis dilute fusco-purpureis. Peritheciis dilute fusco-purpureis, elongato-subfusiformibus, symmetricis, apice rotundatis; ostioli regulares labiis subhyalinis vix prominulis; peritheci pedicello subhyalino, unicellulari, subcylindrico, appendicibus brevioribus, perithecio subaequilato; cellulis basalibus 3, fusco-purpureis; cellulis ascogenicis 2. Ascis 4-sporis Ascosporis basi apiculo uncato, apice calyptra gelatinosa praeditis, 1-septatis, loculo superiore majore. — Totus fungus 215-220 μ alt.

Hab. in *Actobio signaticorni* in Mauretania, Africa boreale.

STEPHANOMYCES Speg., Lab. Arg. (1917) p. 671. — Laboulbeniineus, peyritschiellaceus, monoicus; receptaculo hippocrepice coroni-v. flabelli-formi, e cellula basali nigro-unguiculata majuscula suborbiculari, pluribus subbasalibus radiantibus subimbricatis composito; cellulis marginalibus utrinque praeextimis androsticho psalliato trimero appendiculato ornatis, ceteris paraphysibus filiformibus dime-
ris saepius apice minute psalliato donatis; perithecio e cellula centrali e latere psalliato-cornuta exsurgente, pedicellato ovato laevi; nucleo ascogenico solitario; ascis bisporis; sporis hyalinis geminatis acicularibus obsolete excentriceque 1-septatis; antheridiis solitariis parvis ad apicem androstichi insidentibus inter paraphyses et earum basi adnatis.

1. *Stephanomyces elegantissimus* Speg., l. c. p. 671, fig. 203. — Parvus, 3859 totus plus minusve infuscatus, perithecio obliquo fere ovato-dimidiato, pedicello recto nigro opaco subaequilongo fulto, cornu basilarum pedicelli, paraphysibus extimis sterilibus nec non androstichis basi grosse nigro psalliatas; receptaculo primo conchoideo-contracto, dein flabellato-expanso, cellulis subbasalibus circiter 15 marginalibus, extimis majoribus difformibus nigris opacis.

Hab. in toto corpore *Typhaeae fumatae*, La Plata. — Perith. sine ped. 45-50 \times 25-26; recept. 35 \times 40; alt. tot. 100-120 μ .

TRENOMYCES Chatt. et Pic. — Syll. XXII p. 17.

1. *Trenomyces australis* Speg., Laboulb. Arg. p. 679, fig. 211. — Ma- 3860

sculi et foeminei saepius dense commixti coacervatique, substratum ambitu nigrificantes, utriusque appendice receptaculari puciniiformi pallide olivascente crasse tunicata cellula apicali conoideo-submucronata; peritheciis angustis sursum vix incrassatis, apice breviter conoideis, ostiolo truncato trilobulato deorsum in pedicello non v. vix angustiore parum elongato obsolete limitato, productis.

Hab. in thorace *Menopi* sp. (pediculi) in *Phalacrocorace imperiali* (avi), La Plata — app. 28-30 \times 15; anther. 40 \times 11 (mas); app. 25-28 \times 15; perith. sine ped. 128-150 \times 20 (fem.).

2. *Trenomyces platensis* Speg., Laboulb. Arg. p. 680, fig. 213 — *Apendices* subparvae, vix chlorinae, cellula supera conoidea acuta; antheridia pauca ventricosa; perithecia parum numerosa majuscula elongata, primo recta dein arcuato-diflexa, parte ascophora subfusoides apice conica, ostiolo truncato trilobulato donata, stipite parum brevius conspicue angustiore fulta. 3861

Hab. frequens in toto corpore *Dacophori* sp. (pediculi) in *Aramosclopaeo* (avi), Punta Lara, La Plata Arg. — App. 10 \times 6-7; anther. 28-30 \times 12-13 (mas); app. 18-20 \times 10-12; perith. sine ped. 175-180 \times 25-30; perith. ped. 125-150 \times 10-15 (fem.)

3. *Trenomyces Lipeuri* Thaxt., Proc. Amer. Acad. 1912, p. 383. — *Mas*: 3862
Appendicibus horizontalibus, cellula extrema quam basilari duplo longiore; longit. ab apice appendicis ad ultimam corticatam 42 μ ; appendice 15 \times 9; antheridio 35 μ longo, incluso pede; tubis efferentibus 4 μ long., cetero corpore 18 \times 20 — *Femina*: perithecio 90-110, incluso pede; corpore 60-80 \times 20-28; rhizoide 90-100 μ long., tenuiore 7 μ cr.

Hab. in partibus variis *Lipeuri* sp., ad « Buzzard », Guatemala, *Lipeuri* celeris in California.

4. *Trenomyces Lacmobothrii* Thaxt., Proc. Amer. Acad. 1912, p. 384. — 3863
Mas: Cellula basilari 18 \times 18; appendice 28 \times 18; antheridiis 45-50 μ long. incluso pede; corpore 25 \times 12, incluso tubo efferenti — *Femina*: appendice latiuscula, cellulis subaequalibus; peritheciis, incluso pedicello, 140-160 \times 20-25; appendice 30 \times 20.

Hab. in insecto *Lacmobothrio* atro, ad Cost' New England. — Appendix latior *Pucciniam* fere aemulatur.

5. *Trenomyces gibbus* Thaxt., Proc. Amer. Acad. 1912, p. 386. — *Mas* 3864
ignotus. — *Femina*: *Tr. histophoro* similis; perithecio 300 μ long. incluso pede (20 μ longo) gibbo, apice supra geniculum 32 μ longo, basi 28-30 μ cr., apice 7 μ lat.; appendice 25 \times 10.

Hab. in *Lipeuri* longipili (exempl. unicum), California.

ZEUGANDROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 177. — Receptaculum ex cellulis binis constans, superior perithecium et antheridia gerens; appendices e cellula pedunc. et serie superpositarum cellularum, quarum ima basilari a ceteris discreta vel non, ex cuius latere interiore series binae antheridiorum conjugatorum oriuntur; perithecium vulgo solitarium, cellula pedunc. bene evoluta suffultum; trichogynum e basi partis liberae trichophori.

1. **Zeugandromyces australis** Thaxt., Proc. Amer. Acad. 1912, p. 178. 3865

Hab. in corpore *Scopaei levis*, Palermo Argent. — Perith. 155×40 ; cellula pedunc. 16×27 ; appendix incl. cellula ped. $44-54 \mu$; antheridia 20μ ; long. tot. ad apic. appendicis 90μ , ad apicem perithecii 250μ .

CORETHROMYCES Thaxt. — Syll. XI p. 449, XIV p. 729, XVI p. 681, XVII p. 917.

1. **Corethromyces appendiculatus** Thaxt., Proc. Amer. Acad. 1915, p. 41. 3866

Hab. in elytris insecti *Anaspidis* affinis speciei, Samarang Java. — Perith. $50-60 \times 16$, pes $8-10 \times 5$, pars libera appendicis terminalis 6×2 , appendix primaria axis $28-45 \times 7$, rami hyalini 28μ , long. tot. ad apicem perithecii $70-85 \mu$; receptaculum 10×5 .

2. **Corethromyces ? andicola** Speg., Lab. Arg. p. 487, fig. 29. — Me- 3867

diocris, totus hyalinus; cellula basali conoidea, subbasali subbulbiformi subcuboidea septo obliquo in segmentis duobus triangularibus oppositis divisa, cellulis duobus connatis collum breve angustius efformantibus coronata; cellula ventrali colli anguste lineari pedicellifera, dorsali subcuboidea appendicifera; perithecio sublan- ceolato non v. vix inaequilaterali, in pedicello elongato, deorsum sensim attenuato, producto; appendice androstichali elongata sursum leniter incrassata subfusioidea $12-15$ -mera, paraphysibus omnino destituta.

Hab. in elytris *Chiliotis formosae*, Nahuel-Huapi, Neuquén, ex Museo Platens. Argent. — Perith. $55-62 \times 19-22$; pedic. $60-65 \times 7-15$; append. $175-200 \times 10-15$.

3. **Corethromyces Silphidarum** Thaxter, Proc. Amer. Ac. of Sc. 54., 3868

1918, p. 217. — Undique et uniformiter sordide flavidum. Peritheciis $50-65 \times 15$; sporis circ. 20×2 ; appendicibus $50-60 \mu$ cum cellula basilari circ. 10×7 ; receptaculo $18-20 \times 16-18$, cellula pedicellari perithecia inclusa; totus fungus $85-100 \mu$ long.

Hab. ad elytras *Cholevae* sp., Corral Chile, America austr. — Proxima *C. bidentato* et *C. curvato* sed differt forma et habitu erecto

peritheciis, cellula subbasali et cellula pedicellari peritheciis magis elongata.

4. *Corethromyces curvatus* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3869 p. 218. — Color uniformiter pallide flavum; aspectu brevi obtuso, hinc inde fortiter incurvatus Peritheciis 50-60 \times 20-22; sporis circ. 24 \times 2,5; appendicibus e apice ramulorum 75-100 μ ; ramulis longioribus 50-60 μ ; cellula basilari et pedicellari 35 \times 38; totus fungus e apice peritheciis 75-95 μ long.

Hab. in *Cholevae* sp., Ankland Nova Zelandia (EAMES et SINNOTT). — *C. Silphidarum* et *C. bidentato* magis affinis sed differt conformatione peritheciis et appendicum etc.

5. *Corethromyces bidentatus* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3870 p. 219. — Uniformiter pallide flavum, varie incurvatum. Peritheciis 52 \times 15; sporis circ. 20 \times 2-5; appendicibus e apice ramulorum 55-65. Totus fungus 60-70 μ long.

Hab. ad elytras *Cholevae* sp., Ankland Nova Zelandia (EAMES et SINNOTT). — *C. Silphidarum* affinis a qua mox dignoscitur emergentis lateralibus duobus dentiformibus e apice productis.

6. *Corethromyces bicolor* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3871 p. 220. — Perithecio in regione ventrali olivaceo nigricanti, sed parte distali distincte et abrupte hyalina; receptaculo angustato elongato obconico, opaco bilobo. Perithecio 50 \times 16, receptaculo ab apice lobi longioris, pede incluso, 70-85 μ ; totus fungus 110-124 μ long., 20-24 μ latus.

Hab. in pedibus et abdomine *Cholevae* sp., Ankland Nova Zelandia (EAMES et SINNOTT).

7. *Corethromyces argentinus* Thaxt., Proc. Amer. Acad. 1912, p. 181; 3872 Speg. Lab. Arg. fig. 30.

Hab. in artubus et abdomine *Cryptobii* sp., Palermo Argent. et *Cryptobii agilis*, Santiago. — Perith. 160-290 \times 40-55; pars ascigera 165-170 μ , cellula ped. 40-60 \times 20-30; sporidia 40 \times 3,5; axis primar. appendicum 50 μ ; long. tot. ad apices append. longior. 370 μ ; ramuli crassiores 8 μ ; recept. 40 \times 8.

8. *Corethromyces ? subsigmoideus* Speg., Lab. Arg. p. 505, fig. 44. — 3873 Parvus, pallide stramineus; cellula basali parva obconica subbasali majore rotundata ventre prominula; androsticho erecto brevi 4-5-mero, articulis cito decreascentibus saepius appendiculis brevissimis tenuibusque ornatis; perithecio lanceolato-naviculari, apice obtuso, dorso superne praecipue grosse parceque fusco-verrucoso, basi cellulis 2 segmentiformibus donato, abrupte in pedicello subae-

quilongo arcuatulo producto.

Hab. in parte inf. abdominis *Eurhexii Putzeyssi*, La Plata, Arg. — Perith. $75-85 \times 30$ (sine ped.), ped. $60-65 \times 15$.

9. *Corethromyces formicetorum* Speg., Lab. Arg. p. 490, fig. 32. — Me- 3874

diocis fere hyalinus rectus, cellula basali hyalina ungue minuto donata obconica, subbasali lenissime fumosa latitudine duplo brevior, androsticho fumoso catenula cellulari 4-5-mera paraphysifera ornato, gynosticho etiam fumoso brevi connato, perithecio hyalino elongato sublageniformi coronato.

Hab. in thorace et coxis *Heterotopis formicetorum*, Santa Catalina B. A., Argent. — Alt. tot. $225-250 \mu$; perith. $145-155 \times 40$.

10. *Corethromyces rostratus* Thaxt., Proc. Amer. Acad. 1912, p. 191. 3875

Hab. in partibus variis, praecipue abdomine *Heterothopis* sp., Temperley et Llavallo Argent. — Perithecia, excl. cellula basil., $120-135 \times 20-22$, cell. basil. 8×6 ; receptac. $55-58 \mu$, sporidia 30×3 ; appendix $95-100 \times 12-14$, rami longiores 155μ ; long. tot. ad apicem perithecii $200-230$.

11. *Corethromyces macropus* Thaxt., Proc. Amer. Acad. 1912, p. 190. 3876

Hab. in corpore insecti *Heterothopis*, Llavallo Argentina — Perithec. cum pede 55×8 ; appendix $50-55 \times 8-10$; long. tot. ad apicem perith. $150-180$; sporidia 30μ l.

12. *Corethromyces platensis* Thaxt., Proc. Amer. Acad. 1912, p. 183. 3877

Hab. in corpore *Lathrobii nitidi*, Palermo, Temperley, Llavallo Argent. — Perith. cum basi $118-125 \times 34-40$; pars sporif. $75-100 \mu$; cellula pedunc. $40-60 \times 12-20$; sporidia $24 \times 2,5$; longit. total. append. longior. $150-360 \mu$; recept. incl. pede 40×20 ; long. tot. ad apicem perithecii $85-235 \mu$ — var. *gracilis* Thaxt., l. c., Speg. Lab. Arg. p. 491 fig. 33 (ut spec.), differens perithecio et cellula pedunc. longioribus et angustioribus. — *Hab.* in *Stereoccephalo seriati-penni* et *Lathrobio dimidiato* et nitido, La Plata.

13. *Corethromyces Medonis* Thaxt., Proc. Amer. Acad. 1915, p. 38. 3878

Hab. in abdomine infer. *Medonis curti*, Samarang Java et *Medonis Birmani*, Borneo — Perithecium $78-100 \times 20-28$; pes $20-39 \times 12-16$; appendix primaria $27-31 \times 9$, ramuli longiores 50μ ; long. tot. ad apicem perithecii $125-175 \mu$.

14. *Corethromyces decipiens* Thaxt., Proc. Amer. Acad. 1915, p. 38. 3879

Hab. in abdomine *Medonis birmani* et *Med. ochracei*, Borneo et *Med. curti*, Samarang, Java. — Perith. $75-100$

≈ 16 ; pes $12 \approx 8$; receptac. cum pede $25-30 \mu$, processus calcariiformis $35-40 \mu$, appendix incl. ramis $55-65 \mu$, long. tot. ad apicem perith. $120-150 \mu$.

15. **Corethromyces Ophitis** Thaxt., Proc. Amer. Acad., 1912, p. 182; Speg. 3880
Lab. Arg. fig. 34.

Hab. in insecto *Ophite Fauvelii*, Palermo Argent. (J. BRETHES), La Plata (SPEG.). — Perithecia $175 \approx 28$, inclusa basi 20μ ; appendices 70 , ad apices ramorum 170μ ; receptac. cum pede 50μ ; long. tot. ad apicem perith. 275μ .

16. **Corethromyces pulchellus** Speg., Lab. Arg. p. 495, fig. 37. — Sub- 3881
majusculus; cellula basali subhyalina, subbasali nigra opaca sursum per androstichum in calcare atro opaco producta; perithecio cylindraceo-elliptico utrinque leniter angustato, apice rotundato-ostiolato, deorsum in pedicello valde graciliore pluries brevior attenuato; appendice e cellula tertia supera subcultriformi androstichi exsurgente, articulis obconicis subfumosis alterne sympodiacis, filamentis tenuibus hyalinis coronatis efformata.

Hab. in toto corpore *Pinophili Bergi*, in ins. Santiago, La Plata Arg. — Alt. tot. $190-210 \mu$; perith. $125-130 \approx 30-32$ (sine pedic.).

17. **Corethromyces rhinoceralis** Thaxt., Proc. Amer. Acad. 1912, p. 189, 3882
Speg. Lab. Arg. fig. 38.

Hab. in superficie inf. abdominis *Pinophili suffusi*, Llavallol et Sta Catalina Argent. (SPEG.). — Sporidia intra perith. $45 \approx 6$; perithecium, inclusa basi, $240-250 \approx 46$; spina subterminalis $86-90 \approx 8-10$, cellula pedunc. $60 \approx 15$; receptaculum cum pede 70μ ; appendicis pars libera 135μ .

18. **Corethromyces valdivianus** Thaxter, Proc. Amer. Ac. of Sc. 54., 3883
1918, p. 220. — Regione cellulae pedicellaris perithecii ventricosoinflata, colore opaco ad apicem axis appendicum suffuso. Perithecio $120-140 \approx 20-22$ cellula basali inclusa; sporis $45 \approx 3,5$; receptaculo e apice axis appendicum $100-120 \mu$; in regione ventricosoinflata $28-32 \mu$ latus; totus fungus ad apicem perithecii $190-225 \mu$.

Hab. in apice abdominis *Quedii*, Corral Chile America austr.

19. **Corethromyces Scopaei** Thaxt., Proc. Amer. Acad., 1912, p. 184. 3884

Hab. in abdomine super. *Scopaei fratris*, Palermo Argent. — Perith. $65-75 \mu$; pars ascigera $55-70$; cellula ped. $28 \approx 12$; receptacul. $20 \approx 16$; longit. total. ad apicem perith. $95-120$; sporidia $18 \approx 2$.

20. **Corethromyces scydmaenicola** Speg., Lab. Arg. p. 497, fig. 41. 3885

Parvulus, totus hyalinus; receptaculo breviusculo crassiusculo, cellula basali obconica, subbasali trigona; androsticho, cellula globosa imposito, erecto simplice 5-6-mero, antheridia nonnulla breviter pedicellata ferente; perithecio late rhomboideo elliptico, deorsum breviter pedicellato, ostiolo minuto subbilabiato apice hiante.

Hab. in elytris *Seydmaenidei* cujusdam crassi, in nidis *Attæ Lundii* viventis, La Plata Argent. — Alt. tot. 135-160; perith. 85-90 \times 50 (sine pede).

21. *Corethromyces orientalis* Thaxt., Proc. Amer. Acad. 1915, p. 40. 3886

Hab. in abdomine et prothorace *Stilici Ceylonensis*, Buitenzorg (THOMPSON), Samarang, Java. — Perith. 66 \times 16, pes 40-45 \times 13; append. primaria 25 μ , ramis longiores 250-275 μ ; recept. 28, pars libera processus 24 \times 4; long. tot. ad apicem perithecii 135-145 μ .

22. *Corethromyces pallidus* Speg., Lab. Argent. p. 493, fig. 35. — Me- 3887

diocris, pallidus, cellulis prima et secunda hyalinis, appendice 6-7 mera subsimplice sursum tenuiter ramulosa, achroa ejusdem cellula infima excepta infusata et sequente ramulum antheridiferum proferente saepius fumoso, perithecio elongato elliptico pallide melleo laevi v. subtoruloso cellulis basilaribus eximie perspicuis, pedicello subcylindrico hyalino suffulto ostiolo obtuso coronato.

Hab. in ore et artubus *Sterecephali seriatipennis*, La Plata Arg. — Alt. tot. 140-160; perith. 75-90 \times 20-25 (sine ped.).

23. *Corethromyces Stilici* Thaxt., Syll. XVI p. 681. — *C. pygiphilus* 3888

Speg., Lab. Arg. p. 498 fig. 42 a. — Mediocris, receptaculo fere toto nigro calcare androstichi eximie evoluto subclavulato atque subarcuato plus minusve incurvato obscure melleo, pedicello obclavato hyalino brevior v. longior fulto.

Hab. frequens et abundans in abdomine *Stilici elegantis*, Monte Video et Sta Catalina, B. A., La Plata. — Alt. tot. 150-175; perith. 60-85 \times 25-30 (sine ped.).

24. *Corethromyces rectus* Speg., l. c. p. 499 fig. 42 b. — Majusculus, 3889

totus melleus, erectus, rectus, perithecio elliptico-conoideo v. ovato exappendiculato, cellulis basilaribus indistinctis, cellula pedicellari praelonga recta crassa, receptaculo parvo parce nigrefacto, calcare nigro brevi v. brevissimo, appendice crassa breviuscula pallida v. subhyalina.

Hab. in abdomine *Stilici elegantis*, Sta Catalina B. A. et La Plata, Arg. — Alt. tot. 250-275 μ ; perith. 79-85 \times 22-28 (sine ped.).

25. *Corethromyces verrucifer* Speg., l. c. p. 502, fig. 42 f. — *C. longi-* 3890
cauli Thaxt. peraffinis, ostiolo perithecii e latere ventrali verruca
diffirmi sat prominula distincto, calcare cellulae basalis rudi-
mentario.

Hab. in thorace *Stilici elegantis*, Sta Catalina B. A.,
Argent. — Alt. tot. 150-200; perith. 55-65 \times 20-22 (sine ped.).

26. *Corethromyces stilicicola* Thaxt. — Syll. XVII p. 917 (*Stichomyces*) — 3891

* *C. podophilus* Speg., l. c. p. 504, fig. 43-b. — *C. stilicicolae* Thaxt.
persimilis sed totus plus minusve melleus; receptaculo androsticho
gynostichoque summopere ludentibus non divaricatis, perithecio
sublanceolato exappendiculato, cellula basali receptaculi calcare
plane destituto.

Hab. in femore *Stilici elegantis*, Sta Catalina et La
Plata, Arg. — Alt. tot. 135-150; perith. 75-80 \times 25 (sine ped.).

27. * *C. sternalis* Speg., l. c. p. 504, fig. 43 c. — Praecedentibus valde 3892
affinis ob receptaculum non nigrifactum nec calcaratum sed ab
utroque eximie distinctus pedicello peritheciali incrassato obelava-
toque nec non cellula apicali appendicis longe tenuiterque comosa.

Hab. in artubus *Stilici elegantis*, Sta Catalina B. A.,
Argent. — Alt. tot. 100-125 μ , perith. 55-75 \times 18-25 (sine ped.).

28. *Corethromyces sigmoideus* Thaxt., Proc. Amer. Acad. 1912, p. 187. 3893

Hab. in margine super. dextero prothoracis *Stilici elegan-*
tis, Llavallo, Argent. — Perith. 70-85 \times 23-27; cellula pedunc.
60 \times 18; recept. incluso pede 40 μ l.; longit. total. ad apicem pe-
rithecii 135-170; sporidia 26 \times 3.

29. *Corethromyces unciger* Thaxt., Proc. Amer. Acad. 1912, p. 188, 3894
Speg. Lab. Arg. fig. 42 g.

Hab. in artubus posterioribus *Stilici elegantis*, Llaval-
lo, et La Plata Argent. — Sporidia 26 \times 2,8; perith. 70-85 \times 20-26;
cellula pedunc. 50-125 \times 15; appendices longiores 75 μ ; recept. incl.
pede 30-40, ejus processus 30-60 μ ; tot. longitudo ad apicem pe-
rithecii 150-250 μ .

30. *Corethromyces pygmaeus* Thaxt., Proc. Amer. Acad. 1912, p. 186, 3895
Speg. Lab. Arg. fig. 42 d.

Hab. in capite et labio *Stilici* sp., Palermo et La Plata Ar-
gent. — Perith. 70-85 \times 23-27; cellula pedunc. 60-18; receptac. cum
pede 40 μ ; longit. tot. ad apicem perithecii 135-170 μ ; sporidia
26 \times 3.

31. *Corethromyces brunneolus* Thaxt., Proc. Am. Acad. 1912 p. 185. 3896

Hab. in elytra *Stilici* sp., Temperley Argent. — Sporidia 22

≈ 2,5; perith. 58-62 ≈ 20, pars ascigera 54-58 μ; cellula pedunc. 23-30 ≈ 12; receptac. 24 ≈ 16 cum pede; appendix incl. ramis 100, cellula basilaris 20 ≈ 16.

32. *Corethromyces armatus* Thaxt., Proc. Amer. Acad. 1912, p. 188. 3897

Hab. in superficie super. prothoracis *Stilici* sp., Palermo et Temperley, Tucuman Argent. — Sporidia 32 ≈ 3; perith. 60-70 ≈ 20-23, ejus processus terminalis margine sup. 28 μ, infer. 40 μ cellula pedunc. 30-45 ≈ 12-18; receptac. 30 ≈ 10; appendix longior 175; tot. longitudo ad apicem peritheci 120-150 μ.

33. *Corethromyces thinocarinus* Thaxt., Proc. Amer. Acad. 1915, p. 39. 3898

Hab. in superf. inf. abdominis *Thinocaris pygmaeae*, Samarang Java. — Perith. 55-72 ≈ 12-13; appendix cum ramis 35-50; recept. 9 ≈ 7; processus spiniformis 18-55 ≈ 3; long. tot. ad apicem peritheci 75-95 μ.

34. *Corethromyces Xantholini* Speg., Laboulb. Argent. in Anal. Mus. 3899

Nac. Buenos Aires XXIII p. 183 (1912) c. ic. — Totus fuscus 250-300 μ altus; paraphysisbus saepius ternis, torulosis, extrorsum appendiculatis, plus minusve nigrescentibus; peritheciis pallidis vel fumosis, ex elliptico subcylindratis, 120 ≈ 30, longe pedicellatis.

Hab. in *Xantholino* subtile, La Plata, Argentina. — Affinis *O. Orytobii* Thaxt. et *O. jacobini* Thaxt., a quibus facile distinguitur ob perithecium pedicellatum et paraphyses atratas.

STICHOMYCES Thaxt. — Syll. XVI p. 692, XVII p. 917.

1. *Stichomyces Catalinae* Thaxt., Proc. Amer. Acad. 1912, p. 192. 3900

Hab. in corpore *Conosomatis testacei*, Llavallol, Argent. — Perith. 50-60 ≈ 15-20; recept. incluso pede 30-55 ≈ 9-12; appendicis axis 30-35 ≈ 12; long. tot. ad apicem ramulorum longiorum 75 μ; long. tot. ad apicem perith. 90-125 μ.

2. *Stichomyces Cybocephali* Thaxt., Proc. Amer. Acad. 1915, p. 42. 3901

Hab. in elytris *Cybocephali* sp., Peradeniya Ceylon. — Perith. 30-35 ≈ 7-8; sporidia 25 ≈ 2; axis 20-27 ≈ 7; ramuli 15-18; pes 12 ≈ 5,5.

3. *Stichomyces Pterogenii* Thaxt., Proc. Amer. Acad. 1915, p. 42. 3902

Hab. in elytris *Pterogeni Nietneri*, Peradeniya, Ceylon. — Perith. 40-50 ≈ 9-10; sporidia 18-20 ≈ 2, intra perith.; axis primarius 30-35 ≈ 10-12; ramuli longiores 175 μ.

RHIZOMYCES Thaxt. — Syll. XIV p. 730, XVI p. 680.

1. *Rhizomyces circinalis* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3903

p. 709. — Cellula basali infra constricta et in matrice apparatus rhizoideum efformanti, subbasali parum longiori quam latiori, flavo-brunnescentibus; axe appendicum usque triginta cellulis efformato, interne curvatis, apicem versus circinnatis v. helicoideis, cellula basali obscure rubro-brunnea caeteris pallide flavescentibus et brunneo tinctis; perithecio spinuloso 150×58 , cellula pedicellari 508×28 ; sporis parvis et numerosis 15×2 ; receptaculo 35×28 , appendicibus circ. $275-350 \mu$ long. axe 12μ cr. ramis latioribus circ. 50μ ; totus fungus 690μ long.

Hab. in abdomine *Diopsidis* sp. (Dipt.), Gambia River, Africa occ. (WOLBACH). — *Rh. ctenophoro* proxima species sed characteribus appendicum et perithecii praedistincta.

2. **Rhizomyces confusus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3904

p. 710. — Syn. *Rhiz. crispatus* Thaxter p. p., Mem. Amer. Ac. Arts and Sc. vol. XIII n. 6, p. 323, tab. LII fig. 19, 21. — Cellula subbasali receptaculi processu dentiformi obtuso ultra cellulam peduncularem perithecii protrudenti; axe perithecii cum receptaculo angulum notabile efformanti; appendicibus longis divergentibus, ramulis brevibus numerosis; perithecio uniformiter flavido-brunneo, extus incurvato, apice obtuso, lato, caeterum normali.

Hab. in *Diopside* sp. [Dipt.], Kamerun, Port Natal Africae trop. — A *Rh. crispati* characteribus appendicum, perithecii, receptaculi etc. diversa.

3. **Rhizomyces cornutus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3905

p. 711. — Receptaculo flavido; cellula basali subhemisphaerica in matrice processu rhizoideo efformanti; appendicibus erectis v. leniter divergentibus, axe ex duodecim cellulis constante, basali parva subopaca caeteris flavescentibus et brunneo tinctis, apice quatuor v. quinque ramulis curvis simplicibus brevibus obtusis, flavido-brunneis praeditis; cellula pedicellari elongata, valida subuniformi; regione basilari perithecii nitide succineo-brunnea et cum perithecio concolori extus leniter curvula, $135-140 \times 35-40$, cellula pedicellari $280-350 \times 22$, appendicibus $185-195$, axe ramorum 18μ , ramulis 18μ ; totus fungus $400-525 \mu$ long.

Hab. in inferiori parte abdominis *Diopsidi* sp. (Dipt.), Kamerun, Africa occ. — Proxima *R. circinalis* et *gibbosi* sed characteribus appendicum et perithecii diversa.

4. **Rhizomyces gracilis** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3906

p. 712. — Erectus longus et gracilis; pede normali; cellula basali receptaculi magis lata quam longa; oblique prominenti, subbasali

longiore quam latiore axe divergenti utrinque leniter constricto; appendicibus ex 17 cellulis efformatis hyalinis erectis apicem perithecii vix excedentibus, cellula basilari parva et subtriangulari, ramis ex 5-6 ramulis hyalinis efformatis; cellula pedicellari perithecii brevi, hyalina erecta; perithecio concolori 60×22 cum regione basali 88μ long.; cellula pedicellari 284×15 ; receptaculo circ. 25×14 ; appendicibus 350μ long., ramulis lateralibus circ. 50μ ; totus fungus 355μ long.

Hab. in *Diopsidis* sp. [Dipt.], Killimandjaro Africa or. —

Rh. confuso proximus sed differt characteribus appendicum.

5. *Rhizomyces kamerunus* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3907 p. 713. — Cellulis receptaculi subaequalibus vix longioribus quam crassioribus, subbasali obscuriori; appendicibus suberectis v. plerumque circa perithecium incurvatis, axe ex 10-20 cellulis efformato, infra obscurioribus subopacis; ramulis nonnullis clavatis, nigricantibus, apice subhyalinis, ramulis 2-5 curvulis apicem versus extusque sitis gerentibus, nigricantibus apice incrassatis subhyalinis; cellula pedicellari perithecii basi plerumque incurvata et tunc perithecio parum divergenti; peritheciiis $75-80 \times 25$, cellula pedicellari $35-50 \times 11$, sporis circ. $22 \times 2,5$, appendicibus 175μ , ramis $70-100$, receptaculo circ. 22×8 , totus fungus $140-160 \mu$.

Hab. ad crura antheriora *Diopsidis* sp. [Dipt.], Kamerun. Africa occ. — *Rh. confuso* proxima sed characteribus ramulorum, perithecii etc. diversa.

SPHALEROMYCES Thaxt. — Syll. XI p. 453, XIV p. 736, XVI p. 692.

1. *Sphaleromyces Bruchi* Speg., Laboulb. Argent. in Anal. Mus. Nac. 3908 Buenos Aires XXIII p. 195 (1912), fig. 23. — Parvulus, $190-200 \mu$ altus, fuscus, calcare nigro $50-60 \times 15-13$ armatus; appendicibus sterilibus axillaribus paucis brevibus fumosis; perithecio subfusoides, $100-120 \times 25-28$, fusco-fumoso, longitrorsum valvatis dehiscens, ostiolo minute bidentato.

Hab. in *Lema D'Orbignyi* et *L. Dejanii*, minas Gerais, Brasilia.

2. *Sphaleromyces andinus* Speg., Lab. Arg. p. 670, fig. 202. — Medio-3909 eris, receptaculo elongato-obconoides nigerrimo opaco, perithecio melleo sub ostiolo nigricante e cylindraco subfusoides, apice abrupte subtruncato-bilabiato, labiis rotundatis inter labia minute appendiculata.

Hab. in abdomine *Philonthi impressifrontis*, Na-

huel-Huapi, And.: Argent.—Perith. sine pede 75-85 × 23-25; alt. tot. 175-200 μ.

3. *Sphaleromyces speluncalis* Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 18, tab. II, fig. 23-29. — Minor, 140-155 μ long. tot., dilute rufo-brunneus, pellucidus tenuiter tunicatus, stigmatiferus. Receptaculo 40-50 μ longo, bicellulari; cellulae basales obconicae, 30-40 × 15-21, pede atro et parte inferiore supra pedem macula subatra notata; cellulae subbasalis pentagonae septo inferiore transversali. Appendice masculo pede unicellulari nec non 4-6 cellularum oblique septatarum serie formato, seriei cellulis ramos hyalinos, septatos, tenuissime tunicatos (antheridiferos?) mox collabescentes gerentibus. Peritheci pedem a cellulis basalibus vix distincto. Perithecio ellipsoideo-oblongo 80-85 × 26-28, pellucido, apice cornubus brevibus, 2 hyalinis et tertio atrato. praedito. Ascosporis ad $\frac{1}{2}$ - $\frac{1}{3}$ inferiorem uniseptatis, aciculari-subfusiformibus, hyalinis, laevibus, 32-36 × 2-2,5, strato mucoso obvolutis.

Hab. in abdomine *Heterothopis nigrae*, Tlemcen Algeria Africae bor. (P. DE PEYERIMHOFF).

CERAIMYCES Thaxt. — Syll. XVI p. 682, XVII p. 918.

1. *Ceraimyces minusculus* Thaxt., Laboulb. on Chrysom. 1914, p. 47. 3911

Hab. in antennis *Chaetocnema aenae*, Balacava, Jamaica. — Perith. 70 × 26; cellulae I-II 18 × 21, cell. III 30-32 × 4; appendix inclusis antheridiis 22; long. total. ad apicem peritheci 90-95 μ.

2. *Ceraimyces dislocatus* Thaxt., Laboulb. on Chrysom., 1914, p. 47. 3912

Hab. in superf. inf. abdominis *Chaetocnema minutae*, Trinidad. — Perith. 80-90 × 35; cellula I 50-85 × 15; cellula II 17 × 18, cellula III 24-28 × 7; appendix ad apicem antheridii 25 μ; longit. tot. ad apicem peritheci 125-175.

3. *Ceraimyces Chaetocnema* Thaxt., Laboulb. on Chrysom., 1914, 3913 pag. 49.

Hab. in elytris *Chaetocnema* sp., Amazonia, *Chaetocn. minutae* et *Epitrichis lucidae* et *E. convexae*, Port of Spain, Trinidad. — Perith. 60-116 × 38-42; sporidia 52 × 4; cell. I-II 60-122 × 22-25; cell. III 38-42 × 8-10; appendix 30 μ; long. tot. ad apicem peritheci 160-250 μ.

4. *Ceraimyces Epitrichis* Thaxt., Laboulb. on Chrysomel. 1914, p. 45. 3914

Hab. in elytris *Epitrichis convexae*, Port of Spain, Trinidad. — Perith. 50-70 × 16; appendix, inclusis antheridiis, 30-32 μ;

cellula III $28 \approx 7$; long. totalis ad apicem perithecii 140-160 μ .

5. *Ceraomyces obesus* Thaxt., Laboulb. on Chrysom., 1914, p. 46. 3915

Hab. prope basim artuum anter. *Epitrichis convexae*, Port of Spain, Trinidad. — Perith. $106-112 \approx 52-60$; append. incl. antheridiis 18 μ ; receptac. cellulae I-II $52 \approx 18$, cell. III $36 \approx 10$, long. tot. ad apicem perithecii 140-160 μ .

6. *Ceraomyces trinidadensis* Thaxt., Laboulb. on Chrysom., 1914, p. 48. 3916

Hab. in artubus *Epitrichis convexae*, Port of Spain, Trinidad. — Perith. $80-88 \approx 28$; cellula I $28-35 \approx 18$; cellula II 18 μ , cell. III $28 \approx 10$; appendix, inclusis antheridiis, 35; long. tot. ad apicem perithecii 125 μ .

7. *Ceraomyces Nisotrae* Thaxt., Laboulb. on Chrysom., 1914, p. 49. 3917

Hab. in elytris, imprimis sinistr. *Nisotrae* sp., Kamerun et Madagascar, Afr. — Perith. $100-125 \approx 35-40$; sporidia $40 \approx 4$; cellulae I-II $50 \approx 22-24$, cell. III $24-28 \approx 8-10$; longit. total. ad apicem perith. 175-200 μ .

ECTEINOMYCES Thaxt. — Syll. XVII p. 918.

1. *Ecteinomyces Agathidii* R. Maire, Bull. Soc. Hist. Nat. Afrique du 3918

Nord, t. 11, 1920, Extr. p. 31, tab. II fig. 18-19. — Hyalinus v. dilutissime stramineus; receptaculo multicellulari, e cellulis (plerumque 6-8) applanatis, monostichis, contexto, perithecium v. rarius 2 perithecia, nec non 1-2 appendices secundarias infra perithecia gerenti, apice in appendicem primariam abeunt. Appendice primaria receptaculo simillina, plerumque 4-cellulari, ramos breves et saepe ramulos filiformes elongatos gerenti. Appendicibus secundariis brevibus, 2-4-cellularibus, rarius parce ramosis. Perithecio juniori ellipsoideo-elongato, apice regulari, obtuso. Antheridiis non visis. — Totus fungus 70-102 μ alt.

Hab. in *Agathidio laevigato* Er., in Mauretania Tingitana, Africa bor.

2. *Ecteinomyces devexirostris* Speg., Laboulb. Arg. p. 536, fig. 79. — 3919

Majusculus, hyalinus; receptaculo lineari recto v. flexuoso 32-36-mero, deorsum vix attenuato, sursum recte in androsticho lineari brevi 6-8-mero mox deciuo producto, cellulis fere omnibus longitudine parum latoribus; antheridia non visa; appendicibus paucis filiformibus breviusculis; perithecio sub-ellipsoideo superne abrupte in ostiolo cylindrico saepius longiore apice obtuso minute bilabiato; in juventute erecto ad maturitatem devexo, producto.

Hab. in elytris et abdomine *Copropori argentini*,

La Plata, frequens. — Alt. tot. 500-600 μ ; perith. sine ostiolo 80-115 \times 30-35.

3. *Ecteinomyces argentinensis* Speg., Laboulb. Arg. p. 533, fig. 77. — 3920
 Majusculus, hyalinus; receptaculo lineari recto v. flexuoso 15-22-mero, deorsum leniter attenuato sursum recte in androsticho lineari 12-20-mero producto, cellulis omnibus longitudine duplo triplo vel latioribus; antheridia pauca articulis supremis androstichi lateraliter insidentibus, appendicibus fere nullis; perithecio ovato superne abrupte in ostiolo conico recto breviori apice obtuso attenuato.

Hab. in thorace et abdomine *Copropori argentini*, frequens, La Plata. — Perith. 160-175 \times 55-60, alt. tot. 350-400 μ .

4. *Ecteinomyces platensis* Speg., Lab. Arg. p. 543, fig. 84. — Majuscu- 3921
 lus, subhyalinus; receptaculo late lineari recto 25-32 mero, deorsum valide acuteque attenuato, ungue nigro calcare concolore adscendente nullo v. plus minusve evoluto armato, sursum oblique in androsticho crasso brevi 7-9-mero, appendicibus ventralibus brevibus tenuibus densis barbato, producto, cellulis omnibus lineari-bus polyblastis v. septis verticalibus 1-3 irregulariter muralibus; antheridia non visa; perithecio receptaculo recte imposito elongato-sublanceolato sursum attenuato abrupte (e latere ventrali denticulo obtuso limitato) in ostiolo cylindrico breviori saepius rect. v. ad maturitatem patulo v. devexo apice subcapitato-acutato producto.

Hab. in toto corp. *Copropori platensis*, S. Catalina B. A., Arg. — Perith. sine ost. 80-140 \times 30-38; alt. tot. 275-425 μ .

5. *Ecteinomyces filarius* Thaxt., Proc. Amer. Acad., 1912, p. 212. 3922

Hab. in elytra *Copropori rutili*, Tucuman, Argent. (SPEGAZZINI). — Sporidia 30-35 \times 3; perithec. 70 \times 14, cellula pedis 18 \times 8; receptac. 230-275 \times 7-9; long. total. 290-340 μ .

6. *Ecteinomyces Copropori* Thaxt., Proc. Amer. Acad., 1912, p. 213. — 3923

Hab. in abdomine *Copropori rutili*, Tucuman, (SPEGAZZINI) et Guatemala (KELLERMAN). — Perith. 140-200 \times 38-48; cellula pedis et ima basilaris 20 μ ; appendix 60-100; long. tot. ad apicem perithecii 325 μ .

7. *Ecteinomyces major* Speg., Laboulb. Arg. p. 541, fig. 82. — Major, 3924
 hyalinus, modice arcuatus, receptaculo basi flabellato-contracto multiloculari cum androsticho continuo, filamentis antheridialibus simplicibus tenuibus patentiusculis, perithecio patulo incurvato cylindraceo abrupte in ostiolo parum angustiore sed conspicue longiore producto.

Hab. in thorace *Phaenonoti Spegazzini*, ad truncos salicinos in ins. Santiago, La Plata. — Perith. sine ost. 150-175 \times 48-50; ostiol. 250 \times 20-30; alt. tot. 700-800 μ .

8. *Ecteinomyces lumbricoideis* Speg., Lab. Arg. p. 539, fig. 81. — Dioi- 3925
cus?, majusculus, hyalinus apicem versus fuscescens; receptaculis cylindricis 45-50-meris, recte in gonatophoro esomorpha 20-25-mero utrimque indefinito productis, cellulis latitudine duplo triplove latioribus superis saepius tamen subcuboideis supremisque subimbri-
catis atque fusciscentibus, nonnullis antheridiis conoideis curvulis sessilibus praeditis nonnullis peritheciis 1 v. plurimis nec non ap-
pendicibus filiformibus donatis; peritheciis elliptico-ovatis in ostiolo elongato attenuato incurvulo productis.

Hab. in abdomine *Phaenonoti Spegazzini* ad truncos salicinos in ins. Santiago, La Plata. — Alt. tot. 350-500; perith. sine ostiolo 50-55 \times 32-36.

9. *Ecteinomyces intermedius* Speg., Laboulb. Arg. p. 538, fig. 80. — 3926
Mediocris, hyalinus; receptaculo lineari 8-15-mero cum gonatophoro 15-20-mero, articulis fere omnibus longitudine latioribus, continuo, perithecio subsessili oblique adscendente v. deflexo elongato superne abruptiuscule in ostiolo cylindraco conspicue breviori subobtusiusculo producto; antheridiis parvis conoideis sessilibus solitariis v. geminatis e cellula basali filamentorum androstichi exsurgentibus.

Hab. in coxis et tibiis *Phaenonoti Spegazzini*, ad truncos salicinos in ins. Santiago, La Plata. — Perith. cum ostiolo 125-150 \times 25-30.

10. *Ecteinomyces rhytidopus* Speg., Laboulb. Arg. p. 546, fig. 86. — 3927
Mediocris, hyalinus; receptaculo pentamero, cellula basali maxima elongata trasverse dense minuteque ruguloso-papillosa, ceteris subcuboideis laevibus, exappendiculato; antheridiis ad angulum superum cellularum androstichi sparsis; sessilibus minutis conoideis; perithecio erecto, pedicello subturbinato brevi fulto, subcylindraco apice subacutato.

Hab. in elytris *Phaenonoti Spegazzini*, ad truncos salicinos in ins. Santiago, La Plata. — Perith. sine ped. 75-85 \times 18-20; recept. 80-90 \times 8-18.

11. *Ecteinomyces perpusillus* Speg., Laboulb. Arg. p. 543, fig. 83. — 3928
Perpusillus hyalinus saepius geniculatus, perithecio subhorizontali cellulae gynostichi majusculae ad medium usque adnato, elliptico, eximie longiusculeque rostrata ostiolato, androstichi cellula infera

etiam majuscula dorso perithecii adfixa 1-antheridiifera, appendice simplici gracili breviuscula donato.

Hab. frequens ad antennis *Rhopalophori Gestroi* in nidis *Attæ Lundii*, Sta Catalina B. A., Florecio Varela et La Plata. — Perith. 45-48 × 17-18; alt. tot. 60-65 μ.

12. *Ecteinomyces? bonariensis* Speg., Laboulb. Arg. p. 535, fig. 78. — 3929

Parvus, hyalinus; receptaculo turbinato brevi recte in appendice multicellulari producto, cellula subbasali perithecia saepius bina v. terna anguste lanceolata breviterque pedicellata praedita, cellulis inferis appendicis antheridia pauca sessilia ad angulum ventralem superum gerentia, appendice primo contracta sursum sensim leniterque attenuata 20-25 mera, articulis initio brevissimis longitudine conspicue latioribus serius elongata superne subfusoides, articulis latitudine longioribus, paraphysibus omnino nullis.

Hab. infrequens in elytris *Staphylini* sp. parvulae, La Plata. — Perith. sine ped. 55-65 × 14-16; alt. tot. 180-225.

13. *Ecteinomyces thinocharinus* Thaxt., Proc. Am. Ac., 1912, p. 213; 3930 Speg., Lab. Arg. fig. 87.

Hab. in abdomine *Thinocharis exilis*, Temperley, Palermo et La Plata Argent. — Sporidia 20 × 2,5; perith. 120-130 × 23-27; receptaculum 55-65 μ; appendix pedis 18 μ; appendix 35-50 μ, ramuli 75-90 μ.

14. *Ecteinomyces pusillimus* Speg., Laboulb. Arg. p. 545, fig. 85. — Per- 3931

pusillus, hyalinus; receptaculo lineari 3-4-mero recto in perithecio submajusculo sessili elliptico-ovato producto, androsticho filiformi 4-6 mero patentiusculo donato.

Hab. in elytris *Trichopteridini* sp. perexiguae, in nidis *Attæ*, Sta Catalina B. A. et La Plata. — Perith. 35 × 12-13; recept. 30 × 5-7

15. *Ecteinomyces zuphiicola* Speg., Laboulb. Mus. ital., in Anal. Mus. 3932

Nac. Buenos Aires XXVI (1915) p. 454, fig. 2. — Subhyalinus, 150-175 μ altus; receptaculo lineari, subtoruloso, 8-10-cellulari, 75 × 10, in appendice plus minusve 15-cellulari, concolore vel obscuriore, parum angustiore, 70-80 × 6-8, non vel vix subfusoides producto; perithecio pleurogeno, cellula apicali receptaculi inserto, subcylindraco, 80 × 30, basi nodulo brevi, crasso, bicellulari fulto, subhyalino, lineis transversis 8-10 tenuissimis fumosis notato, deorsum abrupte cuneato-rotundato, apice conice umbonato, ostiolo minuto exappendiculato.

Hab. in *Zuphio piceo*, Palón, Pegù.

MISGOMYCES Thaxt. — Syll. XVI p. 693.

1. **Misomyces Clivinae** Thaxt., Proc. Amer. Acad., 1915, p. 49. 3933

Hab. in margine elytrae *Clivinae* sp., Java (RONYER). — Perith. 112×42 ; long. tot. ad apicem peritheci 580; latitudo maxima receptaculi 32μ ; appendix primaria 70×12 .

2. **Misomyces Heteroceri** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 33, tab. II fig. 20-25. — Dilutissime 3934

ambrinus, perithecio rufo-brunneo. Receptaculo 2-5-cellulari; cellulis monostichis verrucosis; cellula basali elongata-uncinata, cellulis mediis subelongatis, cellula superiore perithecium; apicalem et appendicem masculam divergentem gerenti. Appendice mascula basi inflata verrucosa, tricellulari, rarius 4-cellulari, persistenti, apice ramosa mox collabescenti, ad basim ramorum 1-3 antheridia simplicia gerenti. Perithecio lageniformi, basi verrucoso, sursum laevi, cum appendicis masculae parte inferiore conerescenti, symetrico, in rostrum subhyalinum attenuato, ostioli obtusi, labiis 3 papilliformibus; peritheci pedicello unicellulari brevissimo, cellulis basalibus 3 parvulis. — Totus fungus 163-320 μ alt.

Hab. in *Heterocero* maritimo Guer., prope Hipponem Reg. Numidia, Africa bor.

3. **Misomyces Lispini** Thaxt., Proc. Amer. Acad., 1915, p. 48. 3935

Hab. in variis partibus *Lispini* impressicollis, Samarang Java, Peradeniya Ceylon, et Borneo. — Perith. $58-62 \times 26-32$; long. tot. ad apicem appendicis primariae $78-105 \times 27-43$; appendix ramosa 50-75; long. tot. ad apicem peritheci 110-140 μ .

4. **Misomyces ornatus** Thaxt., Proc. Amer. Acad., 1915, p. 47. 3936

Hab. in margine elytrae dexteræ insecti *Tachyi* affinis, Peradeniya Ceylon, Samarang Java. — Perith. inclusa basi $80-90 \times 23-30$, ejus appendix terminalis $25-75 \times 4,5$; cellula pedunc. 14×11 ; sporidia $35-40 \times 2,5$; long. tot. ad apicem appendicis primariae 65×25 , ramuli 35-45; antheridia 30×2 .

EUMISGOMYCES Speg., Contrib. estudio de las Laboulb. Argent. in An.

Mus. Nac. Buenos Aires XXIII (1912) p. 176. — Individua hemaphrodita; receptaculum simplici cellulae superpositae omnes longe biseriatae; appendices, seu rami antheridiales, plerumque ramulis sterilibus praeditae; antheridia simplicia.

1. **Eumisomyces Dohrni** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3937

Buenos Aires, XXVI (1915) p. 456, fig. — Subparvus, 150-225 μ altus; cellulis pedicellaribus 5, sursum sensim majoribus, ad septa

constrictulis, vix fumosis; androsticho et gynosticho 3-cellularibus, apice ad maturitatem breviter separatis; psallio nigro; paraphysibus pluribus, densis, brevibus; perithecio e cylindraceo subellipsoideo, $60-85 \times 30-40$, atro, laevi, apice crasso obtuseque umbonato, ostiolo hyalino.

Hab. in *Euplymatia Dohrni* in ins. Sumatra — *Laboulbeniae partitae* Thaxt. valde affinis nisi etiam identicus.

HYDROPHILOMYCES Thaxt. — Syll. XXII p. 16.

1. *Hydrophilomyces elegans* Speg., Laboulb. ital. II, in Anal. Mus. 3938 Nac. Buenos Aires XXVII (1915) p. 54, fig. 19. — Majusculus, 450 μ altus, receptaculo seu stipite 9-mero, cellula basali subhemisphaerica, secunda tertia et quarta alterne hypertrophicis, subclavatis, $75-100 \times 30$, caeteris normalibus, subcylindraceis, omnibus achrois; perithecio in gynosticho monomero sessili, elliptico-elongato, 200×60 , sursum attenuato atque sub apice vix incrassatulo abrupteque incurvato, per aetatem vix melleo; androsticho etiam monomero, gynosticho adnato, in appendice divaricatissima, subrecta 20-22-mera, nuda, hyalina, $300 \times 20-25$ producto; antheridiis non visis.

Hab. in *Laccobio scutellari*, « Lago di Tarzo » Venet. Ital. bor.

2. *Hydrophilomyces coneglanensis* Speg., Laboulb. ital. II, in Anal. Mus. 3939 Nac. Buenos Aires XXVII (1915) p. 53, fig. 18. — Mediocris, 250 μ altus, receptaculo seu stipite 8-mero, cellula basali subhemisphaerica, secunda tertia et quarta alterne hypertrophicis, appendices digitiformes $75-100 \times 20 \mu$ efformantibus, caeteris normalibus, cylindraceis, omnibus achrois; perithecio in gynosticho monomero sessili, late elliptico, 150×50 , superne longe recteque attenuato-ostiolato, per aetatem melleo; androsticho etiam monomero, gynosticho adnato, in appendice adpressa, 15-16-cellulari, hyalina, $150 \times 13-19$ producto, latere ventrali ramulis paucis simplicibus rectis setuliformibus ornato.

Hab. in *Laccobio sinuato*, prope Coneglanum, Venet., Ital. bor. — Affinis *H. digitati* Pic. a quo differt receptaculo latiore, appendice brevior et praecipue antheridiis simplicibus non dichotomis.

3. *Hydrophilomyces digitatus* Picard, Bull. Soc. Mycol. Fr. XXV (1909) 3940 p. 245, c. ic., et XXIX (1913) p. 556. — Totus hyalinus. Receptaculo lineari, e 9-15 cellulis seriatim dispositis constituto; cellula basali unica; cellulis 4 sequentibus longitudinaliter 1-septatis, lo-

culis 4 alternis in filamentum appendiculare cylindraceum, digiti-forme, divaricatum productis; filamentis longitudinem totius individui fere attingentibus, inferiore longiore, caeteris sensim decre-scentibus; cellulis superioribus 4-9, quadrangularibus, perithecio subsessile, elongato, basi ventricoso, superne in collum cylindraceo-conicum sat angustum et partem ascigeram duplo superans producto; maturitate sporidiis curvulis repleto; appendice primaria e cellulis 8-10 uniseriatis constituta, longitudinem receptaculi subaequante, cellulis omnibus appendicularibus in filamentum exiguum dichotomice ramosum productis. (Mensurae desunt).

Hab. sub elithris, rarius ad abdomen, *Ochthebi marini*, Trappes (Seine-et-Oise), Gallia.

Obs. Ob appendices basilares digitiformes perdistincta species; ut typus novi generis potius habenda.

HELODIOMYCES Picard, Bull. Soc. Mycol. Fr. 1913, p. 557 (Etym.

Helodes, paluster). — Receptaculum e cellulis superpositis unise-riatis constitutum apice perithecium et appendices ferens; perithe-cium globosum apice acuminatum ostiolo lamellis quatuor mobi-libus circumdato; asci numerosi ut videtur tetraspori; sporidia bicellularia cellula distali majori quam basali; parietibus perithe-cii e 4-v. 5 seriebus cellularum constitutis; appendices septatae et dichotomae, e duplice loco orientes: in apice receptaculi, basi perithecii et ex ejusdem perithecii parietibus circa medium sitae.

1. *Helodiomyces elegans* Picard, l. c. p. 558, tab. XXX fig. 11-12. — 3941
Receptaculo incurvato subsigmoideo, 460-475 μ longo e 25-30 cel-lulis superpositis efformato, e basi ad apicem sensim latioribus, apice sub perithecii insertionem subcupulato, perithecio subgloboso 190 \approx 150, apice in ostiolum elongatum abrupte angustato; ap-pendicibus 4-5, infra dichotomice ramosis, septatis, hyalinis 200-225 μ circ. long.; sporidiis fusoides bilocularibus 40 μ long. — Co-lore flavo-aurato pallido. Totus fungus 650-665 μ longo.

Hab. infra et ad latere *Parni prolifericornis*, Verdan-son Montpellier Herault et *Parni hygrobates*, Gramont prope Montpellier, Gallia.

AUTOICOMYCES Thaxt. — Syll. XXII p. 16.

1. *Autoicomyces anaceros* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3942
Buenos Aires XXVII (1915) p. 38 fig. 2. — Parvus, primo totus byalinus dein leniter fumosus, geminatus, alter filiformis, abortivus

vel masculus?, 100×5 , alter evolutus, normalis, $200-250 \mu$ altus; receptaculo 3-cellulari; androsticho 2-cellulari, in appendice crassa, obtusa, 8-10-mera, $120-125 \times 20-25$, cellulis 2 supremis breviter parciissimeque antheridifero-ramulosis producto; gynosticho 1-cellulari; perithecio conoideo-subcylindraceo, recto, $120-145 \times 35-50$, sursum attenuato, mutico, apice rotundato, labiis aequicrassis obtusis ornató.

Hab. in *Laccobio sinuato*, prope Roman et in « Lago di Tarzo », prov. Venet., Italia.

2. *Autoicomycetes crassus* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3943

Buenos Aires XXVII (1915) p. 39, fig. 3. — Majusculus, $250-500 \mu$ alt., melleus; receptaculo 3-cellulari, cylindraceo, subhyalino; androsticho bicellulari in appendice 14-15-cellulari, $75-250 \times 20-35$ metiente producto; gynosticho quoque 2-cellulari, androsticho omnino adnato; perithecio percrasso, $100-125 \times 50-75$, infuscato, sursum obtusissimo, labio ventrali in cornu crasso, modice elongato divaricatoque, octomero, $150-200 \times 30-35$ producto.

Hab. in *Laccobio nigriceps*, prope Coneglanum Ital. bor.

3. *Autoicomycetes melanocerus* Speg., Laboulb. ital. II in Anal. Mus. 3944

Nac. Buenos Aires XXVII (1915), p. 41, fig. 5. — Parvus, 200μ altus; receptaculo trimero, hyalino, late obconoideo; androsticho 2-cellulari, in appendice cylindracea, $35-40 \times 10$, 5-6-mera producto, hyalino; gynosticho adnato, 3-cellulari quoque hyalino; perithecio subconoideo, 70×25 , atro, opaco, ostiolo bilabiato, labio infero in cornu cylindraceo-sigmoideo, $60-65 \times 5-6$, atro producto.

Hab. in *Hydroporo palustri*, prope Coneglanum nec non in « Lago di Tarzo », Venet., Ital. bor.

4. *Autoicomycetes fragilis* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3945

Buenos Aires XXVII (1915) p. 40 fig. 4. — Parvus, $200-250 \mu$ altus, totus hyalinus; receptaculo subcylindraceo, tricellulari; androsticho bicellulari, in appendice crassiuscula, sensim leniterque attenuata, $150 \times 15-20$, nuda, fragillima, 15-16-mera, cellulis duobus supremis antheridiferis producto; gynosticho connato 1-cellulari; perithecio mutico, vix infuscato, cylindraceo-subsigmoideo, 75×50 , superne obtuso, ostiolo obtuso, labio ventrali saepe breviter producto.

Hab. in *Laccobio scutellari*, prope Coneglanum, Ital. boreale.

5. *Autoicomycetes platensis* Speg., Lab. Arg. in An. H. N. Buenos Air. 3946

1917, XXIX p. 467, fig. 9. — Parvus, cellulis pedicellaribus trinis infima minore ceteris sensim vix crassioribus, appendice achroa subbrevis retiuscula 6-8-cellulari facile decidua, perithecio elliptico-

subnaviculari dorso 10-11 mero convexo saturate infuscato ventre subplano 11-13-mero pallidiore.

Hab. in artubus *Tropisterni ochripedis*, La Plata, et Fr. lati, in Patagonia. — Alt. tot. 225-400; perith. 100-125 \approx 35-40.

6. *Autoicomycetes bicornis* Thaxt., Proc. Amer. Acad. 1912, p. 214. 3947

Hab. in superficie infer. abdominis *Berosi* sp. v. aff. gen.; Belgrano pr. Palermo Argent. — Peritheec. 95-110 \approx 40-45; ejus appendix longior 60-100 μ , brevior 70-78 μ ; appendix 135 μ long., receptaculum 80 \approx 35; long. tot. ad apicem perithecii 175-190 μ , ad apicem appendicis int. 310-370 μ .

CERATOMYCES Thaxt. — Syll. XI p. 455, XIV p. 736, XVI p. 693, XXII p. 17.

1. *Ceratomyces congener* Speg., Lab. Arg. in An. M. N. Buenos Aires, XXIX (1917) p. 472, fig. 14. — Pallide melleus; cellula basali 3948

tota hyalina; ceteris receptaculi margine dorsali zona nigra opaca lata, intus crenata, donatis; perithecio subcylindraceo-conoideo, seriebus parietalibus, 20-25 cellularibus, ostiolo subobliquo parum prominulo, sub ipso ventre cornu 1-3 mero erectiusculo vix sigmoideo ornato, appendice antheridiophora elongato subconica 8-10 cellulari, latere interno ramulis antheridialibus copiosis saepius bifidis praedita.

Hab. in abdomine *Tropisterni lati*, Sierra de Paine-mal Patag. et Tr. *ochreipedis*, La Plata. — Alt. tot. 225-350 μ ; perith. 170-190 \approx 70-75.

2. *Ceratomyces erostris* Speg., Lab. Arg. in An. M. N. Buenos Aires, 3949

XXIX (1917) p. 474 fig. 15. — Pallide melleus; cellula basali tota hyalina, secunda omnibus androstichi ed dimidiis gynostichi e latere dorsali opace nigris, ceteris totius microphyti pallide melleis; perithecio omnino exappendiculato subcylindraceo-conoideo, seriebus parietalibus 24-26-meris, ostiolo obtuso laevi; appendice antheridiophora elongato-conoidea 8-10-cellulari, e latere interno vix prope basin, antheridiis parcis, filiformibus ornata.

Hab. in abdomine et thorace *Tropisterni lateralis*, La Plata — Alt. tot. 230-250; perith. 135-140 \approx 45-50.

3. *Ceratomyces tristis* Speg., Lab. Argent. p. 477, fig. 19. — Medio- 3950

cris, cellula basali hyalina, ceteris omnibus receptaculis nigris opacisque, postice secus basin appendicis antheridialis fere in cornu adnata productis; perithecio cylindraceo conico subhyalino exap-

pendiculato, ostiolo rotundato laevi terminato, cellulis serierum parietalium 14-15; appendice antheridiali mox decidua subgracili.

Hab. in abdomine *Tropisterni collaris* v *parani*, in Museo Platensi osservati — Alt. tot. 200-225 μ ; perith. 100-125 μ 45-50.

4. *Ceratomyces aquatilis* Picard, Bull. Soc. Mycol. Fr. 1913, p. 560, 3951

t. XXIX f. 6, t. XXXI fig. 20. — Receptaculo brevissimo 40-45 μ longo e cellulis tribus efformato, supra cellula tertia 2-v. 3 alias cellulas sistunt perithecium et appendicem ferentes; perithecia ovoidea, 95 μ 40, involucri et quatuor seriebus cellularum constituto, infra apicem appendicem corniculatam undulatam nigram, 80 μ longam gerente; sporidiis magnis, 50 μ long., fusoides bilocularibus, loculis subconformibus; appendice e basi perithecii adnata cylindracea, simplice (?) — Colore hyalino, perithecio brunneo, margine obscuriore, appendice corniculata infra nigra apice obscure brunnea. Totus fungus 135-140 μ longo.

Hab. infra abdomine *Hydrochoi carinati*, Trappes Seine-et-Oise, Gallia.

5. *Ceratomyces rhizophorus* Thaxt., Proc. Amer. Acad. 1912, p. 215. 3952

Hab. in artu anter. sinistr. *Tropisterni*, Belgrano pr. Palermo, Argent. — Perithecium 100 μ 40; appendix 135 μ 15 (rupt.); recept. 50 μ , pes 20 μ , longit. total. ad apicem perithecii 150 μ .

6. *Ceratomyces ventriosus* Thaxt., Proc. Amer. Acad. 1912, p. 215. 3958

Hab. in superficie inf. abdominis *Tropisterni*, Belgrano pr. Palermo, Argent. — Perithecium 550-700 μ 100-116 (inf.) et 65-75 (super.); appendix 250-350 μ 30.

7. *Ceratomyces marginalis* Thaxt., Proc. Amer. Acad. 1912, p. 216. 3954

Hab. sub margine elythrae minuti insecti *Hydrophylidi*, Belgrano pr. Palermo, Argentina. — Uniformiter pellucide succineo-brunneus; perithecium 90-110 μ 35-45, appendix longior 100 μ ; receptaculum, pede incluso, 55-60 μ 30; appendix 60 μ 7; longitudo totalis ad apicem perith. 135-150, ad apicem appendicis 225 μ .

8. *Ceratomyces intermedius* Thaxt., Proc. Amer. Acad. 1912, p. 217. 3955

Hab. in margine sinistro thoracis *Tropisterni* sp., Belgrano pr. Palermo, Argentina. — Perithecium 310-390 μ 80-105, basis 50-60 μ ; appendix 105-170; receptaculum leviter succineo-tinctum 74-82 μ 75-78, pedicellus 30 μ long.; appendix 200-45-48 (basi), longit. totalis 660 μ .

SYNAPTOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 217. — Recep-

taculum indeterminatum, e cellularum superpositarum serie constans; seriei apex in cellulas binas collaterales productus; ex his altera cellula est separata a singula cellula minuta oriente e cellula basilari appendiceis, altera vero est basis seriei exterioris formans parietem cellularem peritheci. Appendix constat e serie cellularum superpositarum, ramulos sparsos edente. Perithecium pluricellulare, indeterminatum, ventri a rostro non discreto, superne introrsum appendiculatum.

1. *Synaptomyces argentinus* Thaxt., l. c. p. 218.

3956

Hab. in margine sinistro thoracis *Hydrocharitis* sp., pr. Belgrano Palermo, Argentinae. — Perithecium $335 \times 80-390 \times 105$; appendix sine ramulis terminalibus $110-120 \mu$; receptaculum $250-275 \times 70-80$; peritheci longitudo totalis $700-750$.

COREOMYCES Thaxt. — Syll. XVII p. 924.

1. *Coreomyces argentinensis* Speg., Lab. Arg. p. 485, fig. 27. — Subhya- 3957

linus, brevis, ungue obconico v. hemisphaerico-obconico levi, stipite cellulis tribus sterilibus efformato, cellulas trinas tabulares contiguas, filamentis antheridialibus breviusculis gracilibusque ornatas fulcente, cellula pedicellari subcuboidea, perithecio clavulato superne rotundato ostiolo grosse cylindraceo-papillato coronato.

Hab. in abdomine *Corisae forcipitis* prope La Plata, Argent. — Alt. tot. $225-275$; perith. $100-110 \times 35-40$ (sine ped.).

2. *Coreomyces australis* Speg., Lab. Arg. p. 486, fig. 28. — Subhyalinus, 3958

elongatus, ungue brevi conoideo levi, stipite 8-9-mero articulis magnitudine ludentibus, minoribus saepius antheridiferis, cellulis 4 sequentibus contiguis tabularibus antheridiferis, antheridiis gracilibus, brevibus, cellula pedicellari elongata, perithecio submelleo lanceolato apice non papillato sed suboblique subtruncato-ostiolato.

Hab. in margine anulorum abdominis *Corisae forcipitis*, pr. La Plata, Arg. — Alt. tot. $450-500 \mu$; perith. $140-150 \times 42-45$.

3. *Coreomyces subdivisus* Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, 3959

p. 231. — Uniformiter undique pallide flavo-brunneo; infra perithecio cellulis cladophoris presentibus. Perithecium $80-88 \times 28-30$; appendicibus 125 long.; totus fungus $150-175 \mu$ long.

Hab. in inferiore parte abdominis *Corisae* sp., Concepcion Chile, America austr. — *C. Corisae* proximus.

4. *Coreomyces acuminatus* Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, 3960

p. 231. — Subgracilis, subsigmoideus, apice abrupte acuminatus;

appendicibus parvis, subbrevis. Totus fungus 210 μ long., axe inf. 16 μ cr.; perithecio 80 \times 28, cellula pedicellari 20 \times 22.

Hab. ad marginem abdominis *Corisae* sp., Concepcion Chile, America austr.

5. *Coreomyces italicus* Spegazzini, Obs. microbiol in An. Soc. Cient. 3961 Argentina t. 85., 1918, Extr. p. 13, cum icone. — Ita vocanda est *Coreomyces Corisae* Speg. nec Thaxt.
6. *Coreomyces elongatus* Spegazzini, l. c. cum icone. — Ita vocanda 3962 est *Coreomyces incurvatus* Speg. nec Thaxter.

EUZODIOMYCES Thaxt. — Syll. XVI p. 694.

1. *Euzodiomyces capillarius* Cépède et Picard, C. R. Ass. franc. Avanc. 3963 Sc., Reims 1907, p. 778; Bull. Scient. France et Belgique t. XLII, 1909, p. 263, tab. IV fig. 9; Bull. Soc. Mycol. 1913, p. 564. — Omnino hyalina; receptaculo angusto elongato subrecto, apicem versus incurvato e cellulis stratosi (40 circ. series efformantibus) constituto; peritheciis et appendicibus uno latere tantum dispositis; appendicibus nunquam ramosis, plus minus e basi curvulis, terminalibus longissimis flexuosis, omnibus septulatis, intricatis, peritheciis 80 μ circ. long., receptaculo 480 \times 50, appendicibus majoribus 640, 2-3 μ latis.

Hab. in elytris et abdomine *Lathrobii multipunctati*, ad ripas fl. Slack Ambleteuse, Pas-de-Calais, Galliae.

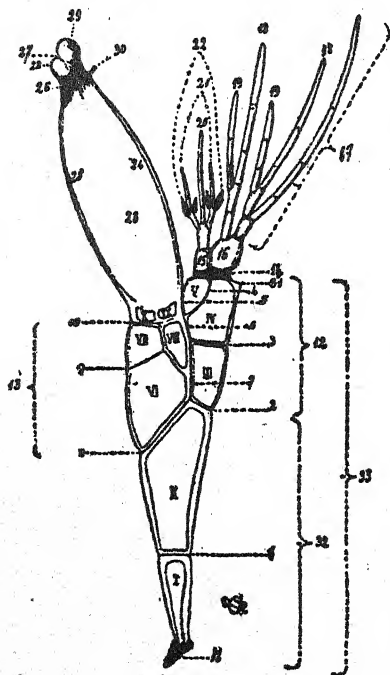
THRIPOMYCES Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 71. — Receptaculum hyalinum lineare, primo abbreviatum hippocrepicum, serius elongatum subrectum, cellulis pluribus monostichis constitutum, tribus infimis crassioribus sterilibus, cum quarta vix angustiore, e latere antheridifera, et quinta magis angusta, etiam sterili, fere bulbum constituentibus, ceteris 7-9 subcylindraceis, nudis, maturando elongatis apice abrupte, perithecio solitario ovato, saepius curvulo, chlorino coronatis. Antheridia pauca, filiformia, simplicia.

1. *Thripomyces italicus* Speg. loc. cit. p. 72 fig. 38. — Caespitosus, 3964 nerrimus, hyalinus, primo saepius hippocrepicus subtorulosus, serius elongatus divaricatus sursum arcuatus, 300-1000 μ altus; stipitibus 11-13-meris, achrois, cellulis 4 basilaribus semper valde abbreviatis, crassioribus, basin bulbosam 50-125 \times 25-40 simulantibus, ceteris gracilioribus, cylindraceis, initio brevibus, serius conspicue elongatis, ad septa non vel vix constrictis; ramulis antheri-

diferis tenuibus, elongatis, 75-250 \times 2-5, vix furcatis, e cellula quarta basali pleurogene fasciculatim exsurgentibus; peritheciis acrogenis, solitariis, conoideis, 65-150 \times 20-50, saepius leniter inaequilateralibus et curvulis, basi truncatis, apice acutis, primo hyalinis dein chlorinis.

Hab. in *Hydraena* sp., prope Coneglanum, Ven., Ital. bor.

LABOULBENIA Mont. et Rob. — Syll. VIII p. 909, IX p. 1132, XI p. 450, XIV p. 730, XVI p. 682, XVII p. 918, XX p. 12 *).



*) I. Cell. basalis seu I. — II. Cell. praebasalis s. II. — III. C. geminata dorsalis infera s. III. — IV. C. gem. dors. supra s. IV. — V. C. subdorsalis s. v. — VI. C. gem. ventralis inf. s. VI. — VII. C. gem. ventr. sup. s. VII. — VIII. C. intermedia s. VIII. — IX. C. hypocarpa dors. s. IX. — X. C. hypoc. ventr. s. X. —

1. Septum basale v. I. — 2. S. subbas. v. II. — 3. S. androstichi v. III. — 4. S. subd. v. IV. — 5. S. interned. superum v. V. — 6. S. interned. medianum v. VI. — 7. S. interned. inf. v. VII. — 8. S. praebasale v. VIII. — 9. S. gymnostichi v. IX. — 10. S. hypocarpicum v. X. — 11. Unguis. — 12. Androstichum s. series cellularum receptaculi partem masculam fulcens. — 13. Gymnostichum s. series cell. recep. partem foeminam sustinens. — 14. Psallium s. annulum hyalinum (*Hyal*o —) v. nigrum (*Melano* —) androstichum coronans. — 15. Andropodium s. cellula aparatum antheridiferum ge-reus. — 16. Paraphysopodium s. cell. paraphyses gignens. — 17. Axis paraphysum primarius. — 18. Paraph.

secundariae. — 19. Paraph. tertiariae. — 20. Axis antheridiophorus primarius. — 21. Axes antheridiophori secundarii. — 22. Antheridia. — 23. Perithecium. — 24. Perith. dorsum v. pars dorsalis. — 25. Perith. venter v. pars ventralis. — 26. Hy-

*) Cnfr. FAULL, *Cytology of Laboulbenia*, in *Annals of Botany*, XXVI, apr. 1912, 4 tab.

**) Nomenclaturae explicationem partium et sectionum vastissimi generis *Laboulbeniae* cfr. apud Spegazzini, *Rev. Lab. argent.* 1917 in *Anal. Mus. Nac. Hist. Nat.* XXIX, p. 552-557 et fig. schem. p. 553.

postomum v. umbo perithecialis. — 27. Ostiolum. — 28. Ostioli labium ventrale. — 29. Ost. lab. dorsale. — 30. Trichogyni reliquiae. — 31. Angulus dorsalis. — 32. Pedunculus receptacularis. — 33. Receptaculum.

(Secundum Cl. C. SPEGAZZINI in l. c.)

Conspectus dichot. Sectionum gen. LABOULBENIAE
(sec. SPEGAZZINI, Las Laboulb. argent., in l. c. p. 555).

1	{	Species ob perithecio v. receptaculo irregulares	<i>Zigolaboulbenia</i>	2
		Species omnibus partibus regulares	<i>Eulaboulbenia</i>	7
2	{	Androstichum et gymnostichum disjuncti	<i>Cerajomyces</i>	
		Androstichum et gymnostichum conjuncti		3
3	{	Cellula I et II proliferantes et tunc parte pedicellari receptaculi 3-polinera	<i>Misgomyces</i>	
		Cellula I et II regulares		4
4	{	Cellula V androstici proliferante	<i>Pleocyttia</i>	5
		Cellula V androstici simplice, regularis, semper paraphysibus destituta	<i>Haploctytia</i>	6
5	{	Psallium nullum	<i>Apsallia</i>	
		Psallium praesens (1-v.-plur.)	<i>Psalliphora</i>	
6	{	Cellulae VI-VIII connexae, III et IV { regulares et subnormales	<i>Laboulbeniopsis</i>	
		{ in unam confluentes	<i>Laboulbeniella</i>	
7 (2)	{	Perithecium et receptaculum appendicibus v. prominentiis variis praediti		8
		Perithecium et receptaculum appendicibus v. prominentiis variis destituti		14
8	{	Appendices v. prominentiae receptaculares v. paraphysariae raro peritheciales praesentes	<i>Metalaboulbenia</i>	9
		Appendices v. prominentiae peritheciales tantum praesentes	<i>Paralaboulbenia</i>	12
9	{	Receptaculum verrucis, spinulis, gibbis ad perithecium quandoque effusis, praeditum; apparatus paraphysum normale	<i>Thelesoma</i>	
		Receptaculum normale, apparatus paraphysum anomalum		10
10	{	Axis paraphysum anormalis inflatus	<i>Pachymastiga</i>	
		Axis paraphysum normalis plus minus elongatus		11
11	{	Andropodium digitatum, corniculatum v. spatulatum	<i>Ceratodactyla</i>	
		Andropodium normale, axis paraphysum solitarium articulo peritheciiforme aucto	<i>Pseudoditheca</i>	

12 (8)	Perithecium verrucosum, gibbosum, corniculatum etc., sed ostiolo semper normali praeditum	<i>Theletheca</i>	
	Perithecium ostiolo anormali praeditum appendicibus variis ornatum	<i>Ceratotheca</i>	13
13	Psallium nullum v. indefinitum	<i>Aphanopsallia</i>	
	Psallium distinctum et visibile	<i>Psalliomela</i>	
14 (7)	Psallium nullum v. hyalinum	<i>Hyalopsallia</i>	
	Psallium semper distinctum et visibile	<i>Melanopsallia</i>	15
15	Apex androstici a gymnostico et a basi perithecii liber.	<i>Schizosonia</i>	
	Apex androstici gymnostico et perithecio connexus		16
16	Perithecia distincte pedicellata, androstico omnino libera	<i>Podocarpa</i>	17
	Perithecia sessilia, pedicello nullo	<i>Apodotheca</i>	18
17	Paraphyses omnino nigrae, opacae, rigidae subcarbonaceae	<i>Anthracotricha</i>	
	Paraphyses hyalinae v. plus minus leniter coloratae	<i>Malacotricha</i>	19
18	Receptaculum omnino nigrum v. opacum, cellulae exceptae	<i>Dichroma</i>	
	Receptaculum subhyalinum, pro parte tantum nigrescente	<i>Subdichroma</i>	
19 (17)	Perithecium e basi ad apicem omnino liberum	<i>Eleutherocarpa</i>	
	Perithecium cum androstico plus minus connexum		20
20	Perithecium usque ad apicem, v. parum infra, androsticho connexum	<i>Synandrocarpa</i>	
	Perithecium infra medium androsticho connexum	<i>Hemisyncarpa</i>	21
21	Paraphyses omnino nigrae, opacae et rigidae	<i>Anthracochaeta</i>	
	Paraphyses incolorae v. leniter coloratae	<i>Malacochaeta</i>	22
22	Paraphyses omnes rudimentales v. peritheciis breviores	<i>Brachymastiga</i>	
	Paraphyses omnes v. nonnullae perithecium superantes		23
23	Paraphyses ex axi primario unico (v. 1-2 secundarios rudimentales praedito) constantes	<i>Monomastiga</i>	
	Paraphyses ex axibus primariis plurimis constantes		24
24	Paraphyses ex axibus 2-3 praeditae, v. axi primario unico (et 1-2 secundarios distinctos praedita) constantes	<i>Oligomastiga</i>	
	Paraphyses ex axibus plus minus numerosis (ultra 3) constantes	<i>Macromastiga</i>	

1. **Laboulbenia Argutoris** Cépède et Picard, Bull. Scient. France Belgique t. 42., 1909, p. 260, tab. III fig. 4-5. — Perithecio receptaculo lateraliter connexo, parte superiore tantum libero, ovoideo, 95-120 \times 40, cum receptaculo 200-250 μ longo, primum hyalino demum praecipue ad basim obscurato; trichogyno filamentoso, multicellulari, ramoso; receptaculo basi leniter incurvato, parietibus crassis praedito, cell. 2. omnibus longiore, 3. longiore quam latiore, 5. minima; appendice externa solitaria, crassa brevi simplici, 90 μ longa, interna solitaria, raro divisa perithecium vix superante; antheridiis brevibus inflatis, terminalibus, 4-5 congestis.

Hab. in Pterosticho (Argutor) intersticto, ad ripas fl. Slack, Ambleteuse (Pas-de-Calais), Gallia, etiam in Pedio siculo Ficuzza (Palermo) (in Picard, l. c. t. 50., 1916-1917, p. 452). — *Lab. polyphagae* affinis.

2. **Laboulbenia gracilipes** Cépède et Picard, O. R. Ass. Franc. Avanc. Sc. Reims 1907, p. 778; Bull. Scient. France et Belgique, t. 42., 1909, p. 261, tab. III, fig. 7. — Tota olivacea, cell. 1. et 2. exceptis plus minus hyalinis; perithecio magno, medio inflato, 80 \times 40, basi receptaculo adnato, apice applanato nigro-maculato poro medio apicali; collo infra et supra gracili medio parum inflato, cellula 2. longiori infr. apice incurvata; appendicibus e cellulis basilariibus ortis, externa crassiori e basi divisa, interna minori etiam e basi divisa; totus fungus append. exceptis 170-180 μ longus.

Hab. ad elythras Bembidii minimi, ad ripas fl. Slack, Ambleteuse (Pas-de-Calais), Gallia. — *L. pedicellatae* proxima.

3. **Laboulbenia Thaxteri** Cépède et Picard, Bull. Scient. France et Belgique t. XLII, 1909, p. 260 tab. III fig. 6; Bull. Soc. Mycol. Fr. 1913, p. 544 t. XXIX p. 2-3. — Perithecio atro apicem versus anguste ovoideo 100 \times 38, cum receptaculo 340-410 μ long., collo elongato angusto cellula 1. brevi 2. elongatissima efformato, receptaculo e basi cell. 3. et 6. subaequalibus parallelis sensim tenuiterque expanso; cell. 5. minuta subtrigona; appendicibus duobus, exteriore gracili septis transversis duobus inferioribus nigricantibus, interiore breviori.

Hab. in Tachypo flavipedi, Andrésey Seine-et-Marne (PICARD), Compiègne (BEDEL), Ducey Manche (PASQUET). — Proxima *L. gracilipedi* et *pedicellatae* sed distincta.

4. **Laboulbenia Notiophili** Cépède et Picard, Bull. Scient. France Belgique, t. 42., 1909, p. 259, tab. III fig. 1-3. — Tota brunneo-olivacea 195 μ longa; perithecio regulariter ovoideo 85-95 \times 32, apice

angustato poro bilabiato, labiis inaequalibus; receptaculo cylindraceo basi incurvato, brunneo-olivaceo cell. 2. longiore, cell. 3. et 6. subquadratis, 5. minori; appendicibus paucis, externa solitaria crassa et longa, 320-350 μ , apicem versus sensim attenuata, cellulis subtorulosis efformata, internis 1-3, gracilibus brevissimis apicem receptaculi non attingentibus quandoque dichotomice divisionis, antheridiferis; antheridiis elongatis plerumque duobus lateralibus; sporis medio curvatis.

Hab. ad prothoracem, elythras, capitem *Notiophili* semipunctati, Mortain (Manche), Gallia (Abbé PASQUET).

5. *Laboulbenia Lichtensteini* Picard, Bull. Scient. France Belgique t. 50, 3969 1916-1917, p. 449, tab. VI fig. 5 (an 6 ?). — Brunneo-olivacea hinc inde obscuriori, basi receptaculi subhyalina. Perithecio ovoideo-cylindraceo 130 μ longo, apice rotundato ostiolato, brunneo-olivaceo apicem versus nigro maculato, labiis hyalinis; sporis magnis 85 μ long.; cellulis receptaculi basali et subbasali cylindraceo-obconicis longitudine subaequantibus; cell. 3. obscuriori, 4. et 5. parvis subapplanatis, parte superiore receptaculi transverse sulcatula; appendicibus brevibus apicem perithecii non attingentibus, fragilibus caducis, mox collabescentibus. Totus fungus 280-300 μ long.

Hab. in Cilleno laterali, Roscoff (Finistère), Gallia (J. LICHTENSTEIN), nec non prope Carteret (Manche) (PICARD) et Brest (PERRIS). — *Lab. pedicellatae* Th. et *L. luxurianti* Pey. proxima.

6. *Laboulbenia Achenii* R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11, 1920, Extr. p. 28, fig. 7. — Receptaculo praeter cellulam basalem subhyalinam laevem dilute brunneo-verrucoso; cellula basali obconica, longiuscula; cellula subbasali brevi, lata; cellulis androstichi lateraliter dejectis, perithecio fere perpendicularibus; cellula 6 applanata brevissima; cellula 3. brevi, perithecii basim attingenti; cellulis 4. et 5. parvis, subquadratis, septo subobliquo separatis; cellulae 5. facie interna libera; psallio nigro, crasso; appendices externae dilute brunneolae, basi et apice, subhyalinae, simplices, divaricatae, cellulis superioribus elongatis; appendices internae cellula inferiore minima, brevissima, antheridia 1-2 gerenti. Perithecio libero, dilute brunneo, ovoideo, apice attenuato; ostioli labiis vix inflatis, rectis, apice hyalinis, basi maculis nigris parvis praeditis; ascosporae fusiformes, 1-septatae, loculo superiore inferiore triplo longiore. — Totus fungus 142-158 μ alt.

Hab. in *Achenio tenello*, pr. Hipponem Reg. Numidia, Africa bor.

7. *Laboulbenia marina* Picard, C. R. Seances Soc. Biologie t. LXV, 3971 1908, p. 584, Bull. Soc. Mycol. de Fr. 1913, p. 546, tab. XXXII, fig. 21. — Receptaculo rigido e cellula basali et subbasali elongatis efformato supra eroso subcupuliformi perithecium et appendices gerente; perithecio ovoideo-conoideo, 76 μ longo, translucido, apice attenuato et rima ostiolarum eccentrica donato; appendicibus e cellulis duobus ortis, exteriori crassiori; 4 appendicibus pro quoque cellula, brevibus transverse nigro-septatis; sporidiis bilocularibus 26 μ long., cellula distali sectis breviori quam basali. — Colore pallide flavo. Totus fungus 150 μ long.

Hab. in Aepo Robini, insula Tatihou prope St. Vaast-la-Hougue, Manche, Gallia.

8. *Laboulbenia antarctica* R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3972 p. 229. — Subuniformiter pallide brunneo-olivacea demum obscuriori, cellula basali pallidiori, caeteris partibus receptaculi punctatis v. maculatis; appendicibus forma conspicuis. Perithecio 75-85 \times 25-32; sporis 35 \times 3,5; receptaculo e cellula basilari 9-105 μ ; appendicibus longioribus 130 \times 3,5-5; totus fungus e apice perithecii 150-175 μ , maxima latitudine 40-45 μ .

Hab. ad basim coxarum? Antartide sp., Punta Arenas, Fret. Magellani, Chile America austr. — *L. orientalis* affinis.

9. *Laboulbenia australis* Thaxt., Proc. Amer. Acad. 1912, p. 202. 3973

Hab. in toto corpore Apianes spec., Tucuman, Argent. — Perith. 110 \times 40, appendix longior 250 μ ; receptac. 100-235 μ ; long. total. ad apicem perith. 250-300 μ .

10. *Laboulbenia fuscata* Thaxt., Proc. Amer. Acad. 1912, p. 197. 3974

Hab. in artubus Argutoris bonariensis, Ins. Santiago pr. La Plata. — Perith. 110 \times 40; receptac. 135 \times 40; tot. longit. 215 μ .

11. *Laboulbenia bonariensis* Thaxt., Proc. Amer. Acad. 1912, p. 199. 3975

Hab. in locis variis corporis Argutoris bonariensis, La Plata, Buenos Aires, Llavallol, Temperley, Argent. — Sporidia 70 \times 6; perith. 135 \times 35 usque ad 210 \times 55; receptaculum 235-335 \times 50-70; appendix longior 200 μ ; long. tot. ad apicem perithecii 300-500 μ .

12. *Laboulbenia granulosa* Thaxt., Proc. Amer. Acad. 1912, p. 198; 3976 Speg., Lab. Arg. fig. 158.

Hab. in artubus Argutoris bonariensis, Insula Santiago pr. La Plata et Argutoris uruguayaci, Montevideo (SPEG.) — Perith. 110 \times 40; receptac. 135 \times 40; longit. total. 215 μ .

13. *Laboulbenia lutescens* Thaxt., Proc. Amer. Acad. 1912, p. 200; Lab. 3977

fumosa Speg. non Thaxt.

Hab. in margine exter. elytræ sinistrae *Argutoris bonariensis*, Buenos Aires, Temperley et Llavallol Argent. — Sporidia 78×7 ; perith. $125-145 \times 35-40$; receptac. $100-135 \mu$; long. total. ad apicem peritheci $225-275 \mu$.

14. *Laboulbenia subinflata* Thaxt., Proc. Amer. Acad. 1912, p. 199; Speg. 3978
Lab. Arg. fig. 170.

Hab. in margine sinistro prothoracis sup. *Argutoris bonariensis*, Buenos Aires, Llavallol Argent. et *Arg. postici*, *Arg. confusi* et *Arg. bonariensis*, Misiones, Tucuman, Sta Catalina et La Plata (SPEGAZZINI). — Sporidia 55×5 ; perith. $175-185 \times 45-50$; receptac. $310-415 \times 62-78$, cellula subbas. latior 187×75 ; appendice $200-215$; longit. tot. ad apicem peritheci $350-585 \mu$.

15. *Laboulbenia andina* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3979
p. 230. — Olivaceo-brunnea, infer. parte peritheci obscuriori; minuta, brevi, crassa, perithelio distincte longiori et latiori quam receptaculo et regione basali; cellula basali lata pallida, subbasali minori et angustiori, septis appendicum externarum simplicium nigris Perithelio $65-70 \times 24-28$; sporis 25×3 ; appendicibus $28-35$; totus fungus $108-112 \mu$ long., a cellula basilari 42μ .

Hab. in pedibus *Bembidii*, Baños de Apoquindo Chile, America austr.

16. *Laboulbenia flexata* Thaxt., Proc. Amer. Acad. 1912, p. 203. 3980

Hab. in margine inf. sinistr. prothoracis *Brachini* sp. in Ins. Santiago La Plata (SPEGAZZINI). — Perith. $155-200 \times 48-55$; recept. $275-390$; appendix exter. $135-155 \times 40$, longior 200×50 ; inter. append. $50-60 \times 12$, ramuli longiores $120-140 \mu$.

17. *Laboulbenia Giardi* Cépède et Picard, Bull. Scient. France et Belgique t. XLII, 1908, p. 258, tab. III fig. 10-11; Bull. Soc. Mycol. Fr. 1913, p. 543, fig. 8. — Pallide flava $280-386 \mu$ longa; perithelio maturo parum obscuro receptaculo concolori, elongato regulari subcylindrico $140-180 \times 60-65$, apice contracto circa porum nigrescente; receptaculo recto, subtrigono, basi attenuato, parietibus infra appendicibus crassis; cellulis 1-2, longioribus quam latioribus, 3-4, parallelis; appendicibus circ. 8 e basi divergentibus, externa infra obscurata, sporidiis fusoides parum curvatis, 64×8 , cellulis duobus dissimilibus efformatis, superiori 40μ circ. longa, inf. circ. 15μ . 3981

Hab. in *Bradycello* (*Dichiotricho*) *pubescenti*, Corolles Manche (A. PASQUET) et Ambleteuse Pas-de-Calais (PICARD),

in *Dichiotricho obsoleto*, Palavas Hérault (PICARD).

18. *Laboulbenia Pasqueti* Picard, Bull. Soc. Mycol. Fr. 1913, p. 550, 3982 t. XXXII p. 22. — Receptaculo 125 μ longo, infra pedunculo brevi donato, supra perithecio adhaerenti; pedunculo e cellula basali brevi et pro parte e cellula subbasali efformato; perithecio magno subcylindraceo 90 \times 36-40, supra tantum libero, infra et lateraliter receptaculo adnato, apice abrupte constricto rotundato; e cellula basali nigra anuliformi cellulis duobus elongatis, interiore minore, ortis, appendices elongatas multiloculares simplices gerentibus. — Colore flavo-succineo et parum brunneo; cellulis III et IV receptaculi maculis transversis brunneis donatis; perithecio infra collo maculis duobus nigris praedito; appendicibus flavo-succineis.

Hab. in *Chlaenio variegato*, Tournus Saone-et-Loire Gallia.

19. *Laboulbenia Deltomeri* Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 30, tab. I, fig. 1. — Maior (a pede usque ad apicem perithecii 410 μ , appendices usque ad 550 μ long.). Perithecii oblongi, 190 \times 58, olivaceo-brunnei, basi et sub ostiolo pallidi, longitudinaliter sulcati, ostiolo abruptiuscule constricto; papillae ostiolarae basi atratae, labiis hyalinis. Ascosporis ad $\frac{1}{4}$, inferiorem 1-septatis, hyalinis, laevibus, utrinque acutis, 75 \times 3. Receptaculo oboconico, 220 μ long., melleo, subtilissime verruculoso, in pariete externa cellularum III et IV brunneo-suffuso. Appendicium pedicello e cellulis IV et V constituto, a perithecio divaricato; appendicibus perithecium valde superantibus, psallio (insertionis cellula) atrato, crasso; appendicium cellulis basalibus valde inaequalibus, appendicis externis cellula basali multo maiore. Appendice externa basi subhyalino dichotome ramoso, ramis a basi vel a regione supra-basali brunneis. Appendice interna iuvenili breviter ramosa, antheridifera, adulta longe ramosa et antheridiis exoletis, sterili.

Hab. in elytris *Deltomeri punctatissimi* Fairm., Djebel Tamesguida Algeria, Africae bor. (P. DE PEYERIMHOFF).

20. *Laboulbenia arietina* Thaxt., Laboulb. on Crysom. 1914, p. 36. 3984

Hab. in elytris *Diosonychae recticollis* et *D. austriacae*, Guatemala (KELLERMAN) et Trinidad. — Perith. 100-140 \times 20-25; appendix termin. 18-25 μ ; receptac. 60-100 \times 24-28; appendix longior 150-175 μ ; long. totalis ad apicem perithecii 160-240 μ .

21. *Laboulbenia Dolicaontis* R. Maire, Bull. Soc. Hist. Nat. Afrique du 3985

Nord, t. 11., 1920, Extr. p. 26, fig. 6. — Receptaculo verruculoso dilutissime brunneolo; cellula basali et cellula subbasali subaequilongis; cellula sexta subelongata; cellula 3. peritheci basim vix attingenti; cellulae 5. facie interna sursum libera; cellula 4. majore, a cellula 5. minore septo recto, psallio nigro perpendiculari, separata. Appendices externae simplices, divaricatae, cellulis inferioribus subaequalibus, dilutissime brunneolis, superioribus subhyalinis; appendices internae, cellula inferiore parva, brevi, 2 ramulos antheridiferos breves gerenti. Perithecio praeter basim libero, dilutissime brunneolo, subfusiformi, laevi, apice laeniter, attenuato; ostioli labiis inflatis, incurvis, apice hyalinis, basi nigro-maculatis; ascosporae fusiformes uniseptatae loculo superiore inferiore duplo longiore. — Totus fungus 300-360 μ alt.

Hab. in Dolicaonte densiventri Fauvel, prope Hipponem Reg. Numidia, Africa bor.

22. *Laboulbenia marginata* Thaxt., Proc. Amer. Acad. 1912, p. 205. 3988

Hab. in superf. inferiori abdominis *Galeritae Lacordairei*, Argentina, (ex Museo Nacional n. 1428). — Perith. 250-275 \times 52, excluso pede; ped. 58 \times 30; receptac. 190-200 \times 90; appendices ad apicem ramulorum 175 μ ; antheridium 24 μ , cellula ejus basilaris 20 μ ; long. totalis ad apicem perith. circ. 500-510 μ .

23. *Laboulbenia inflexa* Thaxt., Proc. Amer. Acad. 1912, p. 204 (*L. inflecta*). 3987

Hab. in elytra sinistra *Galeritae spec. nigrae*, La Plata (SPEGAZZINI). — Perith. 110-128 \times 35-38, pedic. 15-20 \times 8; recept. 98 \times 40-45; cellula ejus basil. 45-50 \times 20; appendices 20 μ , ramuli 50-75 μ ; antheridium 20 μ , ejus pedic. 10-12 μ .

24. *Laboulbenia sordida* Thaxt., Proc. Amer. Acad. 1912, p. 206; Speg. 3988
Rev. Lab. Arg. fig. 126 i.

Hab. in apice elytrae *Galeritae Lacordairei* etc., La Plata — Perith., dempto pedicello, 215-235 \times 45-47, pedicell. 27-31 \times 27; receptac. 215 \times 66; appendices ad apices ramulorum 160 μ ; antheridia 23-27 \times 6.

25. *Laboulbenia funeralis* Thaxt., Proc. Amer. Acad. 1913 p. 208, Speg. 3989
Rev. Lab. Arg. fig. 115.

Hab. in margine elytrae *Gyrini ovati*, pr. Palermo et La Plata Argent. — Peritheciam 110-155 \times 35-40; appendix termin. longior 20 μ ; long. tot. ad apicem peritheci 235-350, latitudo maxima 38-68 μ .

26. *Laboulbenia Grylli* Thaxt., Proc. Amer. Acad. 1915, p. 45.

Hab. in superf. inf. abdominis *Grylli albifrontis*, Samarang, Java. — Perith. 500-750 \times 100-120, apex 70-75 \times 18, rostrum 50 μ (basi), 32 μ vertex; sporidia 45 \times 7; recept. cell. basil. 160 \times 70, subbasal. 550-780 \times 60; long. tot. ad apicem perithecii 1300-1700 μ .

27. *Laboulbenia subulata* Thaxt., Proc. Amer. Acad. 1915, p. 46. 3991

Hab. in superf. inf. abdominis *Grylli burdigalensis* Oerisyi, Indo-Malaya. — Perith. 500-700, venter 120 \times 58, apex 48-20; sporidia 28 \times 4; receptac. 275-400 \times 58.

28. *Laboulbenia idiostoma* Thaxt., Laboulb. on Chrysom. 1914, p. 28. 3992

Hab. in antennis *Halticæ jamaicensis*, Eunery, Hayti (MANN). — Perith. 122 \times 30-35; receptac. 70-85 \times 35-42, appendix longior 200 μ ; long. tot. ad apicem perithecii 175 μ .

29. *Laboulbenia fuliginosa* Thaxt., Laboulb. on Chrysomel. 1914, p. 28. 3993

Hab. in elytris et superf. inf. *Halticæ plebejæ*, *H. amethystinae*, *H. jamaicensis* et *H. spec.*, Hayti, Cuba, Vera Paz, Jamaica. — Perith. 100-125 \times 40-48; sporidia 55 \times 5,5; receptaculum 150-200 \times 45-52; appendix longior 95; long. tot. ad apicem perithecii 60-90 μ .

30. *Laboulbenia Halticæ* Thaxt., Laboulb. on Chrysomel. 1914, p. 29. 3994

Hab. in *Haltica* sp., Kamerun (SCHWAB) et *Systema Deyrollei*, Port of Spain Trinidad. — Perith. 70-90 \times 25-30; receptac. 85-125 \times 25-30; appendix longior 150 μ , rarius 227 μ ; longit. tot. ad apicem perithecii 125-210.

31. *Laboulbenia funebris* Thaxt., Laboulb. on Chrysomel. 1914, p. 44. 3995

Hab. in elytris *Halticæ* sp. (?), Guatemala (KELLERMAN). — Perith. 75-80 \times 25; sporidia 45 \times 5; appendix longior 140-150; long. tot. ad apicem perithecii 125-160, latitudo maxima 35 μ .

32. *Laboulbenia cristatella* Thaxt., Laboulb. on Chrysom. 1914, p. 43. 3996

Hab. in superf. inf. *Halticæ scutellatae*, Trinidad, *Asphaeræ Siebersii* et *Lacticæ nigricipitis*, Para Brasiliæ. — Perith. 60-76 \times 18-22; recept. 50-64 \times 22-28; appendix longior 125 μ ; tot. long. ad apicem perithecii 100-140 μ .

33. *Laboulbenia Hermaeophagæ* Thaxt., Laboulb. on Chrysom. 1914. 3997. pag. 32.

Hab. in apice elytræ *Hermaeophagæ* sp., Port of Spain Trinidad. — Perith. 80-25; sporidia 50 \times 5; receptac. 70-80 \times 30; appendix longior 70 μ ; long. total. ad apicem perithecii 150-175 μ .

34. *Laboulbenia Heteroceratis* Thaxt., Proc. Amer. Acad. 1912, p. 207; 3998 Speg., Rev. Lab. Argent. fig. 120.

- Hab.* hic illic in corpore *Heteroceratis ciliaticol-
lis* et *validi*, Sta Catalina, La Plata (SPEGAZZINI) et Kan-
sas (A. STEWART). — Perith. $110-120 \approx 35-40$; receptac. $156-235 \mu$;
appendix $50-60 \mu$; long. total. ad apicem peritheec. $220-240 \mu$.
35. *Laboulbenia crispata* Thaxt., Proc. Amer. Acad. 1917, p. 719. 3999
Hab. in abdomine *Hippelatis*, Panama. — Perith. $85 \approx 22$,
processus termin. $10-12 \approx 3,5-4$; recept. ad cell. insert. 120μ . ap-
pendix 225 ; long. tot. ad apicem processus 175 .
36. *Laboulbenia anguifera* Thaxt., Proc. Amer. Acad. 1917, p. 720. 4000
Hab. in variis partibus *Hippelatis*, Grenada. — Sporidia
 $50 \approx 3,5$; perith. $100-130 \approx 24-30$; incl. basi; cell. bas. et subbas.
 $218-245 \approx 14-18$, appendices longiores 210 .
37. *Laboulbenia Lacticae* Thaxt., Proc. Amer. Acad. 1912, p. 195; Speg., 4001
Rev. Lab. Arg. fig. 127.
Hab. in apice elytrae, articulis abdominis *Lacticae* *vari-
cornis* v. aff. spec., Palermo et *Lact. nigricipitis*
La Plata, Argentina. — Sporidia $45 \approx 3,5$; perith. $90-100 \approx 24-28$;
receptac. $80 \approx 15$ v. $155 \approx 22$; appendices longiores $135-150 \mu$; long.
total. ad apicem perith. $175-280 \mu$.
38. *Laboulbenia Lagarocérinus* Thaxtér, Proc. Amer. Ac. of Sc., 4002
1918, p. 703. — Cellula basali angulum rectum efformanti, inflata,
duplo longiore quam latiore, ad substratum depresso adhaerenti,
pallide brunnea; axi longo robusto erecto; appendicibus olivaceis
erectis v. oblique incurvatis 35μ circ. long.; peritheciis rectis v.
ambitu subirregularibus $75-80 \approx 20-22$; totus fungus, I cellula ex-
cepta, $140-165 \mu$ long.
- Hab.* ad alas *Lagarocerini* sp. [Dipt.], Gambia River Africa
trop. (Dr. WOLBACH). — Ob cellula basali forma aberranti prae-
distincta species. Structura est typus *Ceraomyces*.
39. *Laboulbenia Lathropini* Thaxt., Proc. Am. Acad. 1912, p. 193. 4003
Hab. in superf. abdominis *Lathropini fulvipedis*,
Llavallol Argentina. — Sporidia $75 \approx 8$; peritheec. $150-175 \approx 45-50$;
receptac. $120-155 \mu$; appendix longior $900 \approx 16$; long. tot. ad api-
cem perith. $900 \approx 16$. — var. *phrynostoma* Speg., Rev. Laboulb. Arg. p.
612, f. 144 b. — A typo ostiolo transverse compresso late liante, apice
androstichi libero, paraphyse abbreviata ramulosaque nec non parte
supera cellulæ basalis tumida atque infuscata recedit. — *Hab.* fre-
quens in superficie inf. capitis *Lathropini fulvipedis*,
Rosario de Sta Fe Argent. — Perith. $130-175 \approx 40-45$; alt. tot.
 $300-500 \mu$.

40. *Laboulbenia rhinoceralis* Thaxt., Laboulb. on Chrysomel. 1914, 4004
pag. 24.

Hab. in elytris *Lemae gracilis*, Para Bras. et *Lemae* sp., Trinidad et Surinam (ROVER). — Perith. 90-120 \times 20-25, ejus processus rhinoceronteus 18 \times 6; sporidia 35 \times 3,5; receptaculum 52 \times 28; appendix longior 52; long. tot. ad apicem perithecii 125-175 μ .

41. *Laboulbenia Hottentottae* Thaxt., Laboulb. on Chrysomel. 1914, p. 26. 4005

Hab. in elytris etc. *Lemae Hottentottae*, Zanzibar Africae orient. — Perith. (excl. cellula basilari) 90-125 \times 18-25; receptac. 90-110 \times 25-32; appendix longior 120; long. totalis ad apicem perithecii 160-200 μ .

42. *Laboulbenia Papuana* Thaxt., Laboulb. on Chrysomel. 1914, p. 23. 4006

Hab. in elytris *Lemae* sp., Nova-Guinea. — Perith. 100-125 \times 25-58; appendix longior 110 μ ; receptacul. incl. processu et excl. pede 85-100 \times 50-60; long. tot. incl. pede 200-228 μ .

43. *Laboulbenia Manobiae* Thaxt., Laboulb. on Chrysomel. 1914, p. 33. 4007

Hab. in apice elytrarum *Manobiae abdominalis*, Madagascar (?) — Perith. 75 \times 25; append. 140 μ ; receptac. 70-80 \times 20; longit. total. ad apicem perithecii 145 μ .

44. *Laboulbenia Monocestae* Thaxt., Laboulb. on Chrysomel. 1914, 4008
pag. 39.

Hab. in artubus *Monocestae atricornis*, Manaos Amazoniae (MANN). — Perith. 85-125 \times 25; recept. 50-55 \times 25-30; appendix longior 175 μ ; longit. total. ad apicem perithecii 140-175 μ .

45. *Laboulbenia Monocrepidii* Thaxt., Proc. Amer. Acad. 1912, p. 197, 4009
Speg. Lab. Arg. fig. 162.

Hab. in elytris *Monocrepidii picti*, Sta Catalina, et *Monocrepidii* sp., Palermo et Llavallol Argentina. — Sporidia 75 \times 4,5; perithic. 120-135 \times 40-45; receptac. 150-225 μ ; appendix longior 80-110; long. total. ad apicem perithecii 250-325 μ .

46. *Laboulbenia alpestris* Picard, Bull. Soc. Mycol. Fr. 1913, p. 552, 4010
tab. XXXII fig. 23. — Receptaculo valde elongato, angusto, cellula subbasali basali duplo longiore, caeteris brevioribus, cellula quinta parva subtriangulari; perithecio brunneo-nigro ovoidec medio latiori apice obtuso rotundato, 85-90 \times 30, ostiolo apicali hyalino, labiis depressis circumdato; appendicibus brunneis circa medium perithecii ortis e duobus cellulis ortis, cellula exteriori appendice unica simplice, 250-260 μ longa, interiori longitudine breviori appendice unica v. duplici donata, antheridia 2-3 gignenti; colore

brunneo-nigro opaco, cellulis receptaculi I et II subhyalinis IV et V subnigris. — Totus fungus 330-340 μ long.

Hab. ad helitras et prothoracem *Nebriae castaneae* et *Gyllenhalii*, M. Cenisio *N. castaneae*, Mt. Joli Sabaudia.

47. *Laboulbenia partita* Thaxt., Laboulb. on *Chrysomel.* 1914, p. 34. 4011

Hab. in elytris etc. *Nisotrae dilectae*, *N. Chaptuisi* et sp., Kamerun et Madagascar. — Sporidia 40 \approx 3,5; perith. 75-85 \approx 32; appendix longior 85 μ ; receptac. 135 \approx 25; long. tot. ad apicem perith. 140-250.

48. *Laboulbenia Nodostomae* Thaxt., Laboulb. on *Chrysom.*, Proc. Am. Ac. Arts Sc. 50., 1914, p. 30. 4012

Hab. in apice elytrae *Nodostomae* sp., Mindanao Ins. Philipp. — Perithec. 60-65 \approx 25; sporidia 40 \approx 4; receptac. 80 \approx 35; appendix longior 175 μ ; long. tot. ad apicem perithecii 130 μ .

49. *Laboulbenia armata* Thaxt., Laboulb. on *Chrysomel.* 1914, p. 40. 4013

Hab. in elytris *Oedionychi sublineati*, Teapa Mexico. — Perithec. 120-125 \approx 24 30; processus corniform. 12-14 μ long.; receptac. 70-80 \approx 25; appendix longior 175-210 μ ; long. tot. ad apicem perithecii 175-210 μ .

50. *Laboulbenia brasiliensis* Thaxt., Laboulb. on *Chrysom.* 1914, p. 27. 4014

Hab. in artubus et elytris *Oedionychi* speciei affinis, Rio de Janeiro Bras. — Perith. 130-158 \approx 40-48; recept. 175 \approx 52; appendix longior 160; long. total. ad apicem perithecii 350-380 μ .

51. *Laboulbenia Oedionychi* Thaxt., Laboulb. on *Chrysomelid.*, in Proc. Am. Ac. Arts Sc. 50, 1914, p. 32. 4015

Hab. in elytris *Oedionychi* nov. sp., Manila Ins. Philipp, (BANKS). — Perith. 80-85 \approx 20-24; sporidia 48 \approx 4; receptac. 90-140 \approx 28; appendix longior, exter. 175-230; inter. 35-80; longit. tot. ad apicem perithecii 140-210 μ .

52. *Laboulbenia paludosa* Picard, Bull. Soc. Mycol. 1913, p. 548 t. XXIX 4016

fig. 4. — Receptaculo recto 200-205 μ longo e cellulis I et II efformato cellulis III et IV contigue dispositis longitudine subconformibus, cellula V breviori apice praecedenti insinuata; perithecio basi receptaculo adnato breviori subcylindraceo 95 \approx 45, supra infra collo constricto apice labiis rotundatis diviso; cellulis perithecii spiraliter dispositis; appendicibus binis v. ternis e quoque cellula ortis 50-65 μ long., 2-3 locularibus, raro ramosis, loculis cylindraceis septis nigris limitatis. — Colore plus minus intense olivaceo.

Hab. ad helitras *Oodis gracilis*, Vendres prope Béziers, Herault Gallia.

53. *Laboulbenia abyssalis* Maire, Bull. Soc. Hist. Nat. Afrique du Nord 4017 t. VII, 1916, p. 21 fig. 3. — Media (250-280 μ alta); peritheci oblongi 100-112 \approx 37-40, dilute brunneoli ostiolo abruptiuscule constricto; papillae ostiolaræ basi atro maculatae, labiis hyalinis. Ascosporis ad $\frac{1}{4}$ inferiorem uniseptatis hyalinis laevibus, utrinque acutis, 42 \approx 4,5. Receptaculo longe obconico, 200-220 μ longo, non constricto, dilute brunneolo, in cellularum 3. et 4. parte externa plus minusve brunneo-suffuso, cellula basali excepta verrucoso; cellulis 3., 4., 5. et perithecio connatis; cellula 5. subtriangulari parva (9-11 \approx 5-6); psallio (insertionis cellula) atrato, tenui. Appendicum cellulis basalibus valde inaequalibus, cellulis basalibus, appendices externae cellula basali multo longiore sed vix crassiore. Appendices externae vix ramosae, parte inferiore tricellulare, crasse tunicata, plus minusve et praecipue extus brunneo suffusa, plus minusve persistente, parte superiore e cellula dolioliformi dilute brunneola inferiore et cellulis elongatis hyalinis constante. Appendice interna breviter ramosa, antheridifera, ramis sterilibus nullis, hyalina.

Hab. in elytris et pronoto *Oreocyis Bedeli* Peyerh., Djurdjura Algeria Africa bor. (P. DE PEYERIMHOFF).

54. *Laboulbenia Muiriana* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 4018 p. 703. — Pede bene evoluto, cellula basali brevi, hyalina infra septo abrupte latiori; cellula subbasali sublatiori, hyalina punctata, recta 50 \approx 16; cellulis II-VI et cellula basali flavis et obscure punctatis; axe peritheci cum receptaculo angulum acutum efformanti; perithecio flavo, basi leniter inflato apice factura peculiari praedito, 60-70 \approx 18; receptaculo 88 μ ; appendicibus 368 μ long., totus fungus 115 μ long.

Hab. ad basim cruris post. e grege *Oscinidarum* [Dipt.], Lalok River, Nova Guinea britannica, Africa trop. (F. MUIR). — *L. cristatae* proxima sed punctuatione, appendicibus longissimis et apice peculiariter efformato praedistincta species.

55. *Laboulbenia Pachylophi* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 4019 p. 704. — Erecta v. leniter curva; perithecio et cellula basali appendicum externarum obscure et translucide olivaceo-brunneis; cellula basali hyalina infra inflata et pede bulboso praedita; perithecio erecto et axe quandoque leniter divergenti infra olivaceo-brunneo minute granuloso-punctato; ventre vix leniter inflato apicem versus angustato, 60-65 \approx 22; appendicibus 70 μ long.; totus fungus 120-140 μ longus; pede bulboso 16 μ .

Hab. ad crura *Pachylophi frontacis* [Dipt.], Killi-

mandjaro Africa or.

56. *Laboulbenia pectinulifera* Thaxter, Proc. Amer. Ac. of Sc., 53., 4020 1918, p. 706. — Praecipue ad basim leniter curvula subtus ventre et cellula insertionis omnino alba v. demum brunneola; pede normali crasso, cellula basilari leniter inflata connexo; appendicibus externis fortiter divergentibus, curvulis, tricellularibus, apice caespitoso-flabellatis lateraliter plus minus pectinuliferis; perithecio supra basim leniter inflato $70-75 \times 18-24$, sporidiis $35-40 \times 3$; appendicibus $60-64 \mu$ long., cellulis tribus basilaribus 35μ ; totus fungus ad apicem perithecii $100-150 \mu$ long.

Hab. ad thoracem et alas? *Physogeniae* sp. [Dipt.], Kamerun Africa occ. — *Lab. clavuliferae* proxima.

57. *Laboulbenia clavulifera* Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 4021 p. 702. — Erecta; cellula basali et subbasali recta v. curvula; pede normali bene evoluto; cellula basali hyalina parum longiori et a subbasali, brunneola, septo plerumque obliquo separata; cellulis 3. et 6. subaequalibus et oppositis, 4. et 5. fere aequalibus v. 5. angustiori et parum longiori. Perithecio omnino olivaceo, basi parum pallidiori, ventre leniter inflato, apice angustato obtuso, $70-88 \times 18$; sporis circ. $34 \times 2,5$; appendicibus ab apice ramulorum 70μ long. axe 42×12 ; totus fungus $150-225 \mu$ long.

Hab. ad crura? *Physogeniae* sp. [Dipt.], Kamerun Africa trop. — Structura excepta *Lab. pectinuliferae* similis.

58. *Laboulbenia Psilina* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 4022 p. 708. — Leniter sigmoidea ventre flavido-brunneo, laxe crassiuscule punctata, cellula basilari pallidiori et punctata, cellula basilari appendicum externarum obscure olivacea, antheridiis pallidioribus caeterum subhyalina; perithecio divergenti, ventre translucido infra leniter inflato $50-55 \times 18$, sporidiis circ. 28×3 ; appendicibus e apice ramusculorum $55-70 \mu$ long., totus fungus $120-140 \mu$ long., cellula subbasali $50-62 \times 18$.

Hab. ad superficiem abdominis? *Psilae* sp. [Dipt.], Kamerun Africa. — Proxima *L. pectinuliferae*, sed forma generali, colore, caractere ramusculorum appendicum diversa.

59. *Laboulbenia helicophora* Thaxt., Proc. Amer. Acad. 1915, p. 43. 4023

Hab. in artubus anterioribus *Pericalli* sp., Java (ROUYER). — Perith. $175 \times 40-45$, duae appendices marg. expansae 64μ ; appendices longiores 150μ ; recept. $275-315 \times 78-85$; long. tot. ad apicem perith. $390-425$.

60. *Laboulbenia Podontiae* Thaxt., Laboulb. on Chrysom. 1914, p. 36. 4024

Hab. in elytris *Podontia e lutea* et *Pod. 14-punctata*, Hong Kong et Himalaya. — Perith. 70-100 \times 18-20; sporidia 55 \times 3; receptac. 70 \times 24-28, usque ad 100 \times 28; appendices 70 μ ; long. tot. usque ad apicem peritheci 140-160, subinde usque ad 230.

61. **Laboulbenia slackensis** Oépe de et Picard, C. R. Ass. Franc. Avanc. 4025

Sc. Reims 1907, p. 775, Bull. Scient. France et Belgique t. XLII, 1908, p. 257 tab. III fig. 8-9, Bull. Soc. Mycol. 1913, p. 542. — Tota pallide flavo-straminea 300 μ longa; peritheciium magnum subovoideum 130-140 \times 60, apice circa ostiolum bilabiatum nigro-maculatum abrupte contractum; receptaculum crassum, cella 1-2. longiore quam latiore, 2. subpentagonali, cell. 3. subquadrata, 4. et 5. minoribus subquadratis parallele dispositis, 6. magis lata quam alta; cellula antheridifera nigra; appendicibus gracilibus medio dichotomice divis; antheridiis 4-6 elongatis, ovato-subfusoides; sporidiis fusoides subcurvatis.

Hab. in *Pogonochalceo*, Ambletense Pas-de-Calais, Slack et Moldrey Manche (PASQUET) et Gallia litoralis mediterranea (PICARD).

62. **Laboulbenia Polystichi** Picard, Bull. Soc. Mycol. 1913, p. 540, tab. 4026

XXIX fig. 1. — Pallide flava fere hyalina, apice tantum peritheci obscurore; perithecio ventricosò basi lato apicem versus sensim attenuato et tubulo latere interno nigro maculato terminato; appendice externa hyalina, recta nunquam ramosa, cum peritheciium angulum acutum efformante; appendicibus internis duobus e cellula singula parva orientibus, conformibus e cellulis duobus efformatis; antheridiis subterminalibus, basi inflatis apice recto et partem inflatam subaequante terminatis; sporidiis uniseptatis, utrinque acutis, cellula basali duplo majori quam distali; receptaculo 190 μ longo; perithecio 130 μ longo 70 μ lato, sporidiis 60 μ long., appendice externa 255 μ , internis 75-80 μ ; totus fungus e pedè ad apicem peritheci 320 μ long.

Hab. ad helitras *Polystichi connexi*, Tournous Saone-et-Loire, Vendres prope Béziers Herault.

63. **Laboulbenia philippina** Thaxt., Laboulb. on Chrysomel., in Proc. 4027
Am. Ac. Arts Sc. 50., 1914, p. 31.

Hab. in elytris et artubus *Rhembo* affinis speciei, Manila Philipp. (BANKS). — Perith. 85-100 \times 28-35; sporidia 50 \times 3,5; receptac. 100-225 \times 38-42; appendices longiores 210-420; long. total. ad apicem peritheci. 150-335 μ .

64. **Laboulbenia Sapromyzae** Thaxt., Proc. Amer. Acad. 1917, p. 717. 402

- Hab. in alis Sapromyzae triseriatae et Sapromyzae sp., Los Amates Guatemala (KELLERMAN). — Sporidia 50 × 4; perith. 85-105 × 18-22; recept. 70-105 × 18-20, ramuli appendicis longiores 90-100 μ; long. tot. ad apicem perith. 175-225 μ.*
65. *Laboulbenia Muscaria* Thaxt., Proc. Amer. Acad. 1917, p. 718. 4029
Hab. in alis sinist. Sapromyzae musariae, Los Amates Guatemala (KELLERMAN). — Sporidia 52 × 4; perith. 90-110 × 16-20; recept. 88-95 × 18; appendix ad apicem rami longioris 105; long. tot. ad apicem peritheci 200-230 μ.
66. *Laboulbenia Siagonae* Picard, Bull. Soc. Mycol. 1913, p. 545, t. 4030
 XXIX fig. 5. — Receptaculo basi angustiore, rigido, recto, 200 μ longo, cellula subbasali majori; infra flavido supra obscuriori perithecio late fusoido 170-180 × 70-75, obscure brunneo, infra flavidulo v. subhyalino, apice hyalino sed infra colore nigro-brunneo limitatis; cellulis peritheci spiraliter dispositis; appendicibus e cellulis duobus orientibus, exteriori uni-appendiculata interiori tetra-appendiculata, appendicibus 85-95 μ long. interioribus transverse 2-3 septatis; totus fungus 370-380 μ longo.
- Hab. in Siagona (?) rufipedi, Algeria.*
67. *Laboulbenia Steleoceri* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 4031
 p. 708. — Pallide sordideque brunnescenti, perithecio olivaceo-brunneo nigricanti; cellula basali parum curvata v. geniculata, infra hyalina et late rotundata; cellula insertionis utrinque latere libera, parum latiori quam longiori; translucens olivacea; cellula basali appendicum interiorum parum latiori, duos ramos semel v. bis divisos et ad basim parvum numerum antheridiorum crassorum interpositos gerenti; perithecio subopaco, subconico, convergenti, extus leniter convexo, basi lata apice obtuso abrupte expanso, 50 × 22 infra 7,5 μ apice 9 μ; cellula I 30 × 15, II 70 × 16, III-IV 14 × 8, totus fungus 150 μ circ. long.
- Hab. ad alam Steleoceri lepidi [Dipt.], Gambia River Africa occ. — Ceraomyces typus pertinet.*
68. *Laboulbenia Picardii* Maire, Bull. Soc. Hist. Nat. Afrique du Nord 4032
 t. VII, 1916, p. 28, fig. 4. — Maior (500-560 μ alt.); perithecio ovoideo-oblongo, 115-120 × 33-44, dilute melleo, apice in ostiolum concolor basi vix constrictum attenuato. Ascosporis infra $\frac{1}{4}$, inferiorem uniseptatis, hyalinis, laevibus, utrinque acutis; receptaculo longissimo, gracillimo, 430-460 long. dilute melleo, verrucoso. Receptaculi cellulis omnibus elongatis, cellula 2. omnium longissima (250-280 × 20-25). Cellulis 4. et 5. perithecio omnino connatis; cel-

lula 5. subtriangulari-elongata; psallio (insertionis cellula) atrato, crassiusculo (4-5). Appendicum concolorum cellulis basalibus subaequalibus. Appendice externa valde divaricata, simplici v. ramosa; appendice interna perithecio brevior, ramosa, antheridifera; antheridiis lageniformibus rectis.

Hab. in elytris *Tachyis bisulcati* Nic., Larache Mauritania, Africa bor. (P. DE PEYERIMHOFF).

69. *Laboulbenia manubriolata* Thaxt., Proc. Amer. Acad. 1915, p. 44. 4038

Hab. in variis partibus insecti *Tachyis* affinis, Samarang Java, Peradeniya Ceylon. — Perith. $80-135 \times 20-26$; appendices longiores 150; receptac. ad cellulam insertionis $120-300 \times 30-40$; long. tot. ad apicem perith. 160-400 μ .

70. *Laboulbenia asperata* Thaxt., Proc. Amer. Acad. 1912, p. 201, Spag. 4034
Lab. Arg. fig. 149.

Hab. in elytris *Tachyis* sp. Palermo et *Tachyis bona-riensis*, ins. Santiago, La Plata Argentina (SPEG.). — Perith. 110×40 ; appendix longior 250 μ ; receptac. 100-235, long. tot. ad apicem perith. 150-350 μ .

71. *Laboulbenia Veliae* Thaxt., Proc. Amer. Acad. 1912, p. 195. 4035

Hab. in superf. thoracis *Veliae platensis*, Belgrano pr. Palermo Argent. — Sporidia 50×7 ; perith. $125-130 \times 24$; recept. 235-260; cellula prima et secunda 200×18 ; appendices, inclusis ramis longioribus, 200; tot. long. ad apicem peritheci 350 μ .

72. *Laboulbenia hemipteralis* Thaxt., Proc. Amer. Acad. 1912, p. 194. 4036

Hab. in artubus et superf. infer. *Veliae platensis*, Belgrano pr. Palermo Argent. — Perithecia $66 \times 20-33$; sporidia intra perith. $22 \times 2,6$; receptac. 85×23 ; appendices ad apices ramulorum longiorum 105 μ ; tot. long. ad apicem perith. 100-120 μ .

73. *Laboulbenia porrigens* Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 4037

p. 705. — Cellula basali breviuscula uno latere incurvata, plus v. minus inflata v. distorta; cellula basali receptaculi bene evoluta, obscure olivaceo-brunnea cum cellula basali appendicum externarum concolori; axe appendicum externarum e duobus cellulis formato, superiori longiori et pallidiori, cellula basali appendicum interiorum minori quam cellula bas. append. externarum; cellula basali peritheci indistincte punctata; peritheciis bas. 95×28 , sporidiis 35×3 ; appendicibus longioribus 140-157 μ , cellulis III-IV longioribus 40×15 , brevioribus 25; totus fungus 175-210 μ long.

Hab. in superiori parte abdominis parvae *Muscidae* familiae ignotae [Dipt.], Kamerun Africa occ. — Proxima *Lab. (Ceraiomycetes)*

Dahlia, sed appendicibus omnino diversis.

74. *Laboulbenia fasciculata* Peyr. — Syll. XIV p. 731. — * *Omophrone* 4038
Speg., Laboulb. ital. I, in Redia p. 32 (1914) tab. 1 fig. 7. — Erostis, polymastiga, macromastiga, apsallia saepius gracilis et tenella diu hyalina, serius leniter et aequaliter fuscescens, cellula quinta quadripartita, paraphysibus subsimplicibus, praelongis, perithecio ad medium fere usque androsticho adnato, ostiolo obliquo, obtuso. — Altit. 300-350 μ ; perith. 120-130 \times 40; paraph. 200-500 μ longo.

Hab. in *Omophrone limbato* et *O. variegato*, in Italia.

75. *Laboulbenia Leathsi* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4039
Buenos Aires XXIII (1912) p. 215 fig. 45. — Medioeris, 450 μ circ. alta, ferruginea, apsallia, brachymastiga; peritheciis ellipsoideis, 150 \times 60, ad medium usque parte distali adnatis, ostiolo umbonato, exappendiculato, crassiusculo, nigro-torquato, ore subfimbriato; paraphysibus numerosis brevissimis.

Hab. in *Gyrino Leathsi* in Chile — *L. Guerini* Rob. proxima.

76. *Laboulbenia Oodis* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4040
Buenos Aires XXIII (1912) p. 225 fig. 55. — Medioeris, 350-800 μ usque alta, fusco-olivascens, apsallia, brachymastiga; receptaculo normali; perithecio ellipsoideo plus minusve elongato, 150-300 \times 60-90, longitrorsum 4-lineato saepeque torto basi breviuscula parte distali adnato, ostiolo brevi, crasso, obtuso, exappendiculato, in juventute striato-pectinato; paraphysibus densis, brevibus, subfluxilibus.

Hab. in *Oode* (*Stenocrepis*) *laevigato*, La Plata, Argentina. — Habitu perithecii *L. decipientis* Thaxt. affinis.

77. *Laboulbenia mesomorpha* Speg., Laboulb. Arg. p. 606 f. 140. — 4041
Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga, parva, tota obscure castaneo-subpurpurascens, psallio tenui parum manifesto, cellula I pedicelliformi fere tota hyalina, II subtrapezoidi brevi, V majusculo cum IV supra III insidentibus, perithecio elliptico-ovato sursum attenuato, ostiolo rotundato, labiis obtusis hyalinis, vittis duabus longitudinalibus nigris subtortis ornato.

Hab. in elytris *Bembidii convergentis*, in ins. Santiago, La Plata. — Perith. 80-85 \times 40-45, alt. tot. 170-185 μ .

78. *Laboulbenia chirophora* Speg., Lab. Arg. p. 604, fig. 138. — *Eula* 4042

boulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga; parva tota hyalina, paraphysopodio incoloro, axi primario brevissimo concolore, andropodio majusculo hyalino cellulas binas sustinente, ramulis quatuor dimeris achrois crassis obtusis coronato.

Hab. in elytris *Tachys* sp. ind., in ins. Santiago La Plata. — Perith. 65-75 \approx 35; alt. tot. 175-200 μ .

79. **Laboulbenia paraguayensis** Speg., Lab. Arg. p. 606, fig. 141. — Eu- 4043

laboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga; subparva, obscure fusco-olivacea, cellulis I, II et V pallidioribus, andropodio paraphysopodioque corpus subglobosum inferne nigrum opacum efformantibus, paraphysibus breviusculis fuscis, peritheciis subellipticis grosse nigro-umbonatis, ostiolo pleurogeno, labiis vix pallidioribus, sporis saturate olivascentibus.

Hab. in elytris *Calleidae amethystinae*, San Pedro, Paraguay. — Perith. 90-110 \approx 38-43; alt. tot. 200-225 μ .

80. **Laboulbenia asperula** Speg., Laboulb. Argent. in Anal. Mus. Nac. 4044

Buenos Aires XXIII p. 197, fig. 25 (1912). — Tota fuscidula, fere opaca, parvula, 120-180 μ alta, melanopsallia, brachymastiga; peritheciis ovoideis, 80 \approx 40, ad medium fere usque parte distali adnatis, ostiolo cylindraceo, recto, obtuso, exappendiculato; cellulis secunda et tertia receptaculi dense minuteque papillosis.

Hab. in *Trechoides* indeterminata, La Plata, Argentina.

81. **Laboulbenia macrocera** Speg., Laboulb. Mus. ital., in Anal. Mus. 4045

Nac. Buenos Aires XXVI (1915) p. 474 fig. 19 — Enlaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, ceratotheca, infuscata, elongata, gracilis, 750-800 μ alta; cellula basali brevi, pellucida, praebasali brevissima turbinata opaca; androsticho et gynosticho adnatis, angustis, elongatis; perithecio praelongo, cylindraceo, recto, 400-450 \approx 45-50, plus minusve manifeste vittis nigris longitudinalibus 4 notato, apice abrupte angustateque umbonato, ostioli obliqui labio ventrali in appendice parum divaricata, recta, gracili, rigida, atra, opaca 100 \approx 10-15 producto; paraphysibus paucis, ramulosis, rigidulis, fragilibus.

Hab. in *Carabide* quodam (*Miscelus*? sp.), in ins. Sumatra (E. MODIGLIANI) — *L. Langsbergi* Speg. proxima sed facile dignoscenda.

82. **Laboulbenia Langsbergi** Speg., Laboulb. Mus. ital., in Anal. Mus. 4046

Nac. Buenos Aires XXVI (1915) p. 473 fig. 18. — Haplocytia, psalliophora, podocarpa, melanochaeta, ceratotheca, fusca, majuscula,

400-450 μ alta; receptaculo abbreviato, clavulato; paraphysibus elongatis, simplicibus, nigris, 150-250 μ altis; perithecio modice pedicellato (pedic. 50-60 μ alto), subcylindræco, sursum leniter attenuato, 200 \times 25, apice obtusissime crasseque umbonato, ostiolo truncato, labiis hyalinis, cirrulo gracili divaricato fuscescente ornato.

Hab. in *Catascopi* sp., in ins. Java (E. LANGSBERG). — *L. imitantis* Thaxt. proxima.

83. *Laboulbenia Desgodii* Speg., Laboulb. Mus. ital. in Anal. Mus. Nac. 4047

Buenos Aires XXVI (1915) p. 470 fig. 15. — Majuscula, 600 μ circ. alta, fusca, parum translucens ceratotheca; cellulis, prima levis leniterque obconoidea, secunda minute denseque papillulosa subcylindræca, pellucidis et elongatis; perithecio subconoideo, 175 \times 60, apice rotundato subacutato ostioloque obtuso subhyalino vix bipapillato-appendiculato coronato, subopaco, basi breviter androsticho sursum nigrefacto adnato; paraphysibus numerosis, brevibus, 50 μ altis, subtorulosis.

Hab. in *Desgodio* distincto, lacu Pangani, Ushambara, Afr. or. (E. DABBENE). — *L. Dineustis* Thaxt. proxima, sed cellula praebasali asperula et appendicibus ostioli brevissimis distincta.

84. *Laboulbenia Dineustis* Thaxt. — Syll. XVI p. 684. — * *astrantica* 4048

Speg., Laboulb. Mus. ital. in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 471 fig. 16. — Majuscula, 550 μ alta, clavulata, ceratotheca, fere tota fusco-opaca, perithecio crasso recto subconoideo, 200-225 \times 75-80, receptaculo parum brevius.

Hab. in *Dineuste micante*, prope Otonou, Astranti, Afr. occid.* — *neo-guineensis* Speg., l. cit. p. 471 fig. 17. — Major, 800 μ alta, subcylindræca, subpallescens; perithecio dorso leniter curvulo, 200 \times 30, quam receptaculum triplo brevius. A typo etiam toto habitu graciliore recedit. *Hab.* in *Dineuste pectorali* in flum. Pomamou, Nova Guinea (E. MODIGLIANI).

85. *Laboulbenia borealis* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 4049

Buenos Aires, XXVI (1915) p. 468 fig. 13. — *Eulaboulbenia*, haplocytia, melanopsallia, apodotheca, malacochaeta, brachymastiga, ceratotheca, 400-450 μ alta, tota atra opaca; cellula basali non geniculata, gracili, elongata, 105-125 \times 20-30, vix pellucida, praebasali brevi, crassa; perithecio ovoideo-elongato, 150-200 \times 75-90, atro, ostiolo nigro labio postico subcorniculato, antico abbreviato utrimque appendice parva subcylindræca hyalina ornato.

Hab. in *Gyrino boreali*, Bezulian, Amer. septentr. — Affinis *L. gyrinidarum* Thaxt. et *L. gyrinicolæ* Speg. sed statura,

longitudine cellulae basalis et brevitate praebasalis bene distincta.

86. *Laboulbenia gyrinicola* Speg., Laboulb. ital. I, in Redia X p. 34 4050
(1914) tab. II fig. 12. — *Apsallia*, brachymastiga, ceratotheca, tota obscure ochracea fere opaca 250-400 μ alta; cellulis prima et secunda subcylindraceutis gracilibus, pallidis, pellucidis, ad septum primum eximie geniculatis et saepe leniter inflatis, perithecio conoideo, ad tertium inferum usque androsticho adnato, 100-150 \times 50-75, ostiolo obtuso, crasso, hyalino, appendicibus duobus longiusculis curvulis, subtenuibus, 14-16 \times 3-4, acutis, concoloribus ornato; paraphysibus 50-75 μ longis.

Hab. in *Gyrino natatore*, in Italia boreali. — * *stagnalis* Speg., loc. cit., fig. 13. — A typo statura et crassitie conspicue minore satis riteque distincta. Altit. 250-275 μ ; perith. 90-100 \times 25, append. ostiol. 10 \times 3. — *Hab.* in *Gyrino concinno*, prope Porto Maurizio, et *G. elongato* prope Conegliano, Ital. bor.

87. *Laboulbenia birmanica* Speg., Laboulb. Mus. ital., in Anal. Mus. 4051
Nac. Buenos Aires XXVI (1915) p. 467 fig. 12. — Parvula, 175 μ alta, ceratotheca; cellulis pedicellaribus elongatis, subcylindraceutis, septo-primo vix incrassatis; androsticho maximo, infuscato, apice truncato, in paraphysopodio permagno producto; gynosticho minimo; perithecio parvulo, 40 \times 25, ellipsoideo-conoideo, androsticho dorso longe adnato, apice minute ostiolato; appendicibus pusillis, vix perspicuis.

Hab. in *Orechiochilo birmanico*, Karim-geçu, Birmania (L. FEA). — Specimina juvenilia tantum visa.

88. *Laboulbenia orechiochilicola* Speg., Laboulb. Mus. ital., in Anal. 4052
Mus. Nac. Buenos Aires XXVI (1915) p. 477 fig. 21. — Haplocytia, hyalopsallia, apodotheca, ceratotheca, mediocris, geminata, altera subbacillari, abortiva, sterili, 200-250 μ alta, altera evoluta 300-400 μ alta; cellula basali elongata, leniter obconoidea, tortuosa; praebasali etiam elongatula, e cylindraceuto subconoidea; androsticho truncato, nigrescente, paraphysopodio et antheridiopodio hyalinis, paraphysibus paucis concoloribus, basi nigro-annulatis donatis coronato; perithecio brevi, subconoideo, 80-100 \times 25-30, apice bidentato, parte dimidia infera androsticho adnato.

Hab. in *Orechiochilo* Feae, Tenasserim, Birmania India or. (L. FEA). — *L. crassipede* et *L. strangulatae* Thaxt. affinis.

89. *Laboulbenia crassipes* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 4053
Buenos Aires XXVI (1915) p. 469 fig. 14. — Mediocris, 325-350 μ alta, fusca, gracilis, ceratotheca; cellula basali brevi, crassa, cylin-

dracea, curvula; praebasali elongata, gracilis, recta, utrimque abruptiuscule conoideo-ampliata; androsticho, brevi, apice oblique subtruncato, obsolete fusco-psalliato; paraphysopodio et antheridiopodio primo subhyalinis, serius atris, opacis; paraphysorum paucorum cellulis basilariibus conicis, nigris, opacis; peritheciis fuscis, subconoideis, 75×35 , apice obtusis, hyalinis, vix bipapillatis.

Hab. in *Oreochthilo* lucido, Tenasserim, Indiae or. Birmania (L. FEA). — Affinis *L. strangulatae* Thaxt. sed bene distincta.

90. *Laboulbenia valida* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 4054

Buenos Aires XXVI (1915) p. 478 fig. 22. — Haploctytia, hyalopsallia, apodotheca, ceratotheca, majuscula, subelavulata, $500-550 \mu$ alta, sursum valde infuscata et subopaca, deorsum pallida et pellucida; cellula basali subbrevis conoidea, praebasali cylindrica elongata, sexta sat turgida; perithecio pro ratione parvo, 125×50 , conoideo-subelliptico, ostiolo vix pellucido, corniculis duobus concoloribus subunciniformibus ornato; androsticho percrasso, truncato; paraphysibus paucis, brevibus, fuscis, grumoso-constipatis.

Hab. in *Oreochthilo* valido Selesbes (O. BECCARI).

91. *Laboulbenia Modiglianii* Speg., Laboulb. Mus. ital., in Anal. Mus. 4055

Nac. Buenos Aires XXVI (1915) p. 475 fig. 20. — Haploctytia, melanopsallia, apodotheca, ceratotheca, $200-300 \mu$ alta; receptaculo abbreviato, crasso; cellula basali obconica, pallida pellucida, praebasali brevissima infuscata; androsticho superne truncato-rotundato, psallio tenui ornato, paraphysopodio antheridiopodioque maximis, confluentibus, atratis coronato; perithecio subcylindraceo, $100-150 \times 25-44$, basi androsticho breviter adnato, superne abruptiuscule conoideo-attenuato, in umbone atro, dorso appendice nigra, crassa, incurvata, $30-35 \times 7-9$ aucto producto; paraphysibus gracilibus, $100 \times 4-5$, ramulosis, fuscis, facile deciduis.

Hab. in *Thyreopteri* sp., in ins. Sumatra (E. MODIGLIANI). —

L. fissae Thaxt. et *L. Langsbergi* Speg. cognata.

92. *Laboulbenia Texana* Speg., Lab. Arg. 1917 p. 572, fig. 112 a (* calo- 4056

theca, n.). — Eulaboulbenia, metalaboulbenia, pachymastiga melanopsallia, hemisyncarpa, orthotheca, cellulis I et II ad septum primum plus minusve geniculatis hyalinis, ceteris fumosis, perithecio cylindraceo-ellipsoideo superne conico-attenuato lineis 4 longitudinalibus cruciatis notato, ostiolo acutiusculo hyalino hypostomo lato nigro limitato, androsticho tumido subhemisphaerico divaricatulato, psallio lato crassiusculo axibus hyalinis, paraphysario percrasso,

antheridiophoro graciliore brevioraque, 6-7-meris, articulis dorso 1-paraphysatis.

Hab. in thorace Brachyni vicini, ins. Santiago, La Plata. — Perith. 125-135 \approx 38-40; alt. tot. 400-450.

- 93 **Laboulbenia Castelnau** Speg., Laboulb. Mus. ital., in Anal. Mus. 4057
Nac. Buenos Aires XXVI (1915) p. 481 fig. 25. — Haplocytia, apotheca, psalliophora, hemisynandrocampa, major 700 μ alta, paliformis, erecta, recta, fusca; cellulis basali et praebasali cylindraceis, praelongis, 400-500 \approx 30-40; androsticho perithecio ad quartum superum usque coronato, cylindraceo-ellipsoideo, 150 \approx 50, apice umbonato; paraphysopodio et antheridiopodio fasciculatim connatis, vix fumosis; paraphysibus paucis, elongatis, cito caducis.

Hab. in Homalosomate nitidicollis, in Australia occid.

94. **Laboulbenia Dercyli** Thaxt. — Syll. XVI p. 684. — * **Eurysomae** 4058
Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 459 fig. 5. — A typo recedit statura conspicue minore coloreque omnium partium pallidiore, alt. 200-250 μ ; perith. 75 \approx 30.

Hab. in Eurysomate pyroptera, Urugu, Brasilia (SILVESTRI) — * **Burmeisteri** Speg., loc. cit. p. 460 fig. 6. — A typo et a varietate praecedente differt elongatione et gracilitate receptaculi perithecioque magis producto et fere a basi libero, nec non colore omnium partium obscuriore, peculiari distincta. Alt. 400-500 μ ; perith. 150 \approx 40-50. — *Hab.* in Eurysomate Burmeisteri, Corumbà, Brasilia (SILVESTRI).

95. **Laboulbenia pachystoma** Speg., Lab. Arg. p. 587, fig. 124, *L. Guerinii* Speg., Contr. Lab. Arg. n. 38, fig. 44 (non Thaxt.) — Eulaboulbenia, hyalopsallia, hemisyncarpa, subrufescenti-olivacea, cellulis I et II pedicelliformibus pallidis ad septum 1. incrassatis obscurioribusque cellulis ceteris receptaculi inconspicuis; perithecio puncto majusculo nigro excentrice ornato, deorsum androsticho adnato, sursum leniter attenuato, apice truncato-subrotundato, ostioli vix hyantis labiis subhyalinis, hypostomo nigrescente; psallio plane nullo, paraphysibus numerosis brevibus crassis inferne olivaceis laxepanceque subnigro-annulatis; androstichi gynostichi atque perithecii parte infera obsolete transverse ruguloso-granulosa.

Hab. in elytrorum margine Gyrinidei sp. indet., Misiones. — Perith. 65-95 \approx 30-55; alt. tot. 180-250.

96. **Laboulbenia brachynicola** Speg., Lab. Arg. p. 582, fig. 117. — Eulaboulbenia, hyalopsallia, tota mellea et tumida, brevis, crassa, pa-

rietibus omnibus incrassatis, perithecio fere ad basim usque libero ellipsoideo saepe lineis dextrorsis ornato modice crasseque fusco-umbonato, ostioli vix hiantis labiis subinaequalibus rotundatis, paraphysopodio stramineo quam andropodio concolore duplo majore, paraphysibus plus minusve numerosis subbrevis saepius valide deorsum incurvatis.

Hab. in elytris *Brachyni immarginati*, La Plata. — Perith. 135-160 × 90-100; alt. tot. 250-350.

97. *Laboulbenia leptopus* Speg., Laboulb. Arg. p. 586 fig. 122. — *L. ro-* 4061
tundata Speg., Contr. Lab. Arg. n. 58 f. 64 (non Thaxt.). — *Eula-*
boulbenia, hyalopsallia, parva, subrufescenti-olivacea, cellula basali
cylindracea elongata subhyalina, praebasali subpentagona brevi oli-
vascente, III, IV et VI normalibus, VII plane deficiente, V semilu-
nari obliqua, androsticho peritheci dorso adnato, perithecio ovato,
crasso, superne attenuato-conico obtuso, ostiolo labiis hiantibus ro-
tundatis hyalinis, hypostomo nigro; psallio atrophico indefinito ni-
grescente, paraphysibus numerosis brevibus inferne subtorulosis
olivascensibus superne filiformibus hyalinis.

Hab. in elytris *Gyrinidei* sp. ind., Misiones. — Perith. 75-90 × 30-35; alt. tot. 175-200.

98. *Laboulbenia Dysonichae* Speg.; l. cit., fig. 16 (*Laboulbeniella*). — 4062
Fusca, melanopsallia, oligomastiga, 150-200 μ alta; peritheciis el-
liptico-subcylindraceis, 75-100 × 25-28, ostiolo bilabiato plus minusve
nigrefacto.

Hab. in *Dysonicha conjuncta* et *D. bicarinata*, La Plata, Argentina.

99. *Laboulbenia tucumanensis* Speg., Laboulb. Argent. in Anal. Mus. 4063
Nac. Buenos Aires XXIII p. 190 (1912) fig. 17 (*Laboulbeniella*). —
Fusca, melanopsallia, oligomastiga, 180-210 μ alta; peritheciis late
ellipsoideis, 120 × 60, ostiolo bilobo, nigro-annulato.

Hab. in *Dysonicha copulata*, Tucuman, Amer. austr. — *A. L. Dysonichae* Speg. cui affinis, differt praecipue ob perithecia crassiora.

100. *Laboulbenia Homophoëtæ* Speg., Laboulb. Argent. in Anal. Mus. 4064
Nac. Buenos Aires XXIII p. 191 (1912) fig. 18 (*Laboulbeniella*). —
Fusca, melanopsallia, melanomastiga, 200-250 μ alta; cellula recep-
taculi basali elongata, caeteris valde abbreviatis; peritheciis sub-
fusoides, atris, 90-120 × 30-35, non vel vix bilabiatis, longitrorsum
bilineatis; paraphysibus ramosis, divaricatis, fuscis, ramulo interno
ascillari biantheridiato.

Hab. in *Homophoëta 8-guttata*, Minas Geraes in Bra-

silia. — Species pulcherrima eximie distincta.

101. *Laboulbenia endogaea* Picard, Bull. Scient. France Belgique t. 50., 4065
1916-1917, p. 455, pl. VI fig. 6 (an 5?). — (*Laboulbeniella*). Brun-
neo-olivacea, basi receptaculi et appendicibus hyalinis; perithecio
subcylindraco, 50-55 μ longo, apicem versus contracto; ostiolo api-
cali; receptaculo recto e basi ad apicem sensim incrassato; cellula
3. 4. et 5. cellula unica parvam subconoideam efformantibus;
appendice interna fertili, certe decidua, non visa; externa unica
non ramosa, perithecio duplo longiore, hyalina; cellulis appendi-
cum ad septa contractulis omnibus apicem versus sensim majoribus
inflatis; appendice 75-100 μ longa. Totus fungus 130-135 μ longo.

Hab. in *Reicheia usslaubi* var. *sardoa* (Carabi-
dae), Sardinia Italia (CH. FAGNIEE).

102. *Laboulbenia Bergii* Speg., Lab. Arg. p. 565, fig. 102. — *Zigola* 4066
boulbenia, haplocytia, *laboulbeniella*, ceratotheca tota plus minusve
fumoso-subtestacea, cellula basali obconica, praebasali elliptico-sub-
globosa, androsticho et gynosticho irregularibus 1-, rarius 2-, me-
ris, perithecio elongato ellipsoideo, saepius obscuriore, lineis verti-
calibus plus minusve distinctis notato, apice breviter umbonato,
umbone truncato-ostiolato, labio ventrali lineari-spathulato recto
erectoque ornato; psallio angusto nigro, paraphysibus paucis sub-
tenuibus deorsum nodulosis nigrescentibus saepius subcircinatis
donato.

Hab. in abdominis margine *Dysonichae conjunctae*,
Buenos Aires (C. BERG). — Perith. tot. 110-125 \times 30-35; alt. tot.
200-350 μ .

103. *Laboulbenia Systemae* Speg., Lab. Argent. p. 568, fig. 107. — *Zi-* 4067
golaboulbenia, haplocytia, *laboulbeniella*, *apsallia*, tota plus minusve
olivascens, paraphysopodio nigro opaco, paraphysum parte infera
olivacea dorso nigro-marginata parte supera subhyalina, peritheciis
omnino liberis cylindraco-ellipticis, lineis 4-nigris tenuibus dextror-
sis percursis, apice abrupte contracto-umbonatis, hypostomo nigro,
labiis ostiolaribus prominulis hyalinis.

Hab. in elytris *Systemae testaceo-vittatae*, Sta Ca-
talina B. A., Argent. — Perith. 80-85 \times 30-32.

104. *Laboulbenia palustris* Speg., Lab. Arg. p. 562, fig. 100. — *Zigo-* 4068
laboulbenia, haplocytia, *laboulbeniopsis*, *melanopsalia*, apodotheca,
malacochaeta, brachymastiga, parva, perithecio cum receptaculo
breviato angulum rectum efficiente, ovato, pallido ad ventrem fusco-
rufescente, umbone crasso levi obtuso nigro, ostioli labiis hyali-

nis coronato; androsticho majusculo tumidulo, andropodio et paraphysopodio subglobosis saepe subfumosis, cellulas 1 v. 2 basillares axium nigriseptatas ferentibus, paraphysibus paucis crassiusculis oligomeris hyalinis.

Hab. in thorace *Carabidi* sp. pusillae (*Tachys corruscans*?), La Plata. — Perith. 75-80 \approx 45-50; alt. tot. 100-125 μ .

105. *Laboulbenia unicornis* Speg., Lab. Arg. p. 563, fig. 101. — Zigolaboulbenia, haplocytia, laboulbeniopsis, tota chlorina, cellula basali subhyalina obconica, praebasali longiore crassioreque, tertia quarta quintaque androstichum subglobosum efficientibus, sexta quadrangularem subnormalem, septima plane deficientem; psallio angusto stricto atro-olivaceo pellucido; paraphysopodio atque andropodio parvis versiformibus, paraphysibus saepius ternis dorso arcuato deflexis, antheridio unico solitario ad articulum secundum antheridialem; perithecio irregulariter lageniformi, parte sporifera subgloboso-inflata, superne abrupte contracto in umbone conico crasso, ostiolo laterali, labio ventrali supero obtuse rotundato, infero in cornu obliquo dorsali producto. 4069

Hab. in thorace *Anthocomi* sp., Sta Catalina B. A., Argent. — Perith. 65-75 \approx 40-45; alt. tot. 140-175.

106. *Laboulbenia Agrae* Speg., Laboulb. Arg. p. 597, fig. 128. — Eulaboulbenia, melanopsallia, apodotheca, eleutherocarpa, malacochaeta, macromastiga, majuscula, obscure olivacea, dorso androstichi perithecioque parte media atro-olivaceis, margine cellularum inferiorum paraphysum hypostomoque nigris opacis, perithecio ab ima basi libero, elliptico umbone crasso brevi subtruncato, labiis ostioli parvi vix hyalinis coronato, lineis 4 longitudinalibus dextrorsis crassiusculis nigris notato. 4070

Hab. in elytris *Agrae* sp. indeterminata, Ignazú Misiones, Argent. — Perith. 150-180 \approx 65-70; alt. tot. 300-400 μ .

107. *Laboulbenia heroica* Speg., Laboulb. ital. I, in Redia X p. 60 (1914) tab. VIII fig. 56. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, mediocris, 150-275 μ alta, inferne pallida superne infusca, septis tertio et septimo remotis; perithecio atro, 75-100 \approx 35-45, androsticho ad medium fere usque connato, ostiolo sat umbonato, obtuso, vix obliquo, non vel vix centro hyalino; paraphysopodio et andropodio majusculis, atratis; paraphysibus 250 μ circ. altis. 4071

Hab. in *Anisodactylo heroe* in Sardinia. — Affinis videtur *L. melanariae* Thaxt. et *L. ancipiti* Peyr.

108. *Laboulbenia subopaca* Speg., Lab. Arg. p. 657, fig. 183. — Eula- 4072
boulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta,
macromastiga, subopace rufo-fuliginea, cellula basali subhyalina
cylindræco-turbinata, praebasali obscuriore vix longiore, andro-
sticho gynostichoque normalibus subopacis, perithecio cylindræco-
ellipsoideo lineis nigris tenuibus 4 longitudinalibus dextrorsis or-
nato superne attenuato-rotundato grosseque umbonato, hypostomo
nigro, ostiolo pallidiore rotundato, andropodio, paraphysopodio nec
non cellulis duabus v. tribus inferis axium torulosis nigris, para-
physibus tenuibus brevibus fuscis.

Hab. in eytris *Perenoscelis undati*, Misiones Ar-
gent. — Perith. 85-115 \approx 36-40; alt. tot. 190-215 μ .

109. *Laboulbenia hyalopus* Speg., Laboulb. Mus. ital., in Anal. Mus. 4073
Nac. Buenos Aires XXVI (1915) p. 503, fig. 44. — Eulaboulbenia,
haplocytia, melanopsallia, apodotheca, malacochaeta, polymastiga,
macromastiga, minuta, 200 μ alta, ad maturitatem tota atra opaca;
cellula basali excepta semper hyalina; androsticho superne oblique
truncato psallio constricto; paraphysopodio antheridiopodioque majus-
culis, nec non articulis inferis paraphysarum plus minusve nigre-
factis; perithecio ellipsoideo-conoideo, 100 \approx 40, opaco, breviter de-
orsum androsticho adnato, umbone crasso subbrevis obtusoque, ostiolo
subdorsali, labiis vix pallescentibus; paraphysibus filiformibus
150 \approx 5-10.

Hab. in *Brachyno equestri*, Arr-amba, Scioa (ANTI-
NORI). — A caeteris speciebus brachynicolis perfecte distincta.

110. *Laboulbenia pachydermica* Speg., Lab. Arg. p. 656, fig. 182. — 4074
Eulaboulbenia, melanopsallia, apodotheca hemisyncarpa, malaco-
chaeta, macromastiga majuscula, tota tumida, subhyalina, plagulis
perithecii olivascentibus suffusis, parietibus totius corporis pereras-
sis, paraphysopodio quam andropodio duplo majore, paraphysibus
parum numerosis elongatis crassis dorsalibus leniter olivascentibus.

Hab. in elytris *Feroniae lucidae*, Santiago Chile. — Pe-
rith. 85-100 \approx 55-60; alt. tot. 250-300 μ .

111. *Laboulbenia montevidensis* Speg., Laboulb. Arg. p. 653 fig. 180, 4075
L. Brachyni fm. *elongata* Thaxt., *L. Rougeti* Speg., Contr. Lab. Arg.
n. 59 f. 65 (non Mont. et Rob.). — Eulaboulbenia, melanopsallia,
apodotheca, hemisyncarpa, malacochaeta, macromastiga, tota mel-
lea, erecta, robusta, receptaculo rugulis transversis saepe notato,
perithecio ellipsoideo-cylindræco recto saepe lineis 4 longitudina-
libus dextrorsis ornato, paraphysopodio andropodio atque paraphy-

sibus a basi liberis totis pallidis.

Hab. frequens in *Brachyno nigro*, *Br. vicino*, *Montevideo*, in *Brachyno vicino*, *Br. nigripede*, *Sta Catalina B. A. et La Plata*. — *Perith.* 150-175 \times 50-55; *alt. tot.* 350-500 μ .

112. *Laboulbenia Aspidoglossae* Thaxt. — *Syll. XIV* p. 730. — * *L. mat-* 4076

togrossensis Speg., *Lab. Arg.* p. 646, fig. 173 b. — *Eulaboulbenia melanopsallia*, apodotheca, hemisyncarpa, malacochaeta, macromastiga; septo 1., androsticho gynostichoque fumosis, perithecio infuscato sed pellucido, andropodio ac paraphysopodio parum distinctis, cellulis basilaribus axium submajusculis globosis septis nigris limitatis, paraphysibus numerosis filiformibus tenuibus.

Hab. in elytris *Aspidoglossae crenatae*, *Mattogrosso Brasiliae et La Plata*. — *Perith.* 110-125 \times 40-45; *alt. tot.* 375-425 μ .

113. *Laboulbenia fuscula* Speg., *Laboulb. Arg.* p. 651, fig. 178. — *Eulaboulbenia* 4077

melanopsallia apodotheca, hemisyncarpa, malacochaeta, macromastiga, mediocris, recta v. deorsum leniter arcuata, obscure fusco olivacea, cellulis II, III, IV et VI saturatoribus minute nigro-punctatis, apice dorsali cellulae IV sat producto, perithecio, quarto infero androsticho adnato, e cylindraceo fusoides modice obtuseque umbonato, hypostomo dorso nigrefacto ventre pallido, paraphysopodio tumidulo fumoso quam andropodio duplo majore, axi paraphysum primario margine dorsali nigro, paraphysibus tenuibus subhyalinis antrorsum arcuatis, per aetatem fragilibus caducis.

Hab. in elytris *Argutoridii uruguayei*, *Montevideo* — *Perith.* 90-100 \times 28-30; *alt. tot.* 235-250 μ .

114. *Laboulbenia afra* Speg., *Laboulb. Mus. ital.*, in *Anal. Mus. Nac.* 4078

Buenos Aires XXVI (1915) p. 499 fig. 41. — *Eulaboulbenia*, haplocytia, melanopsallia, apodotheca, malacochaeta, polymastiga, macromastiga, saepius valde infuscata, 300-350 μ alta; perithecio ovato-elongato, recto, 125 \times 50, fere ad basim usque libero, sensim crasseque attenuato-umbonato, ostiolo obtuse rotundato vix obliquo, labiis decoloratis; androsticho gynosticho omnino adnato, superne obliquo, psallio majusculo crasso coronato; paraphysopodio toto nigrificato dense flabellato-ramoso, antheridiopodio concolore; paraphysibus densis, erectis, rigidulis, infuscatis, 150-175 μ altis; antheridiis majusculis pluribus; cellula basali dimidia infera pallescente, ceterum atra ut praebasali.

Hab. in *Brachyno 4-punctato*, *Bolama*, *Guinea lu-*

sitanica (L. FEA). — A *L. bolamensi* Speg. et *L. hyalopode* Speg., cui subaffinis, habitu facile distinguenda.

115. *Laboulbenia bolamensis* Speg., Laboulb. Mus. ital., in Anal. Mus. 4079

Nac. Buenos Aires XXVI (1915) p. 501 fig. 43. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta; polymastiga, macromastiga, grandiuscula, 400-500 μ alta, modice infuscata; perithecio subcylindraceo, 150-175 \times 50-55, usque ad basim fere libero, apice subabrupte crasseque conico-umbonato, ostiolo recto subtruncato-rotundato, labiis decoloratis, parietibus lineis 4 longitudinalibus clathratis ornatis; androsticho gynosticho omnino adnato, superne obliquo, psallio majusculo crasso coronato; paraphysopodio dorso plus minusve nigrifato; antheridiopodio etiam sursum atrato; paraphysibus numerosis, fasciculatis, perithecium vix superantibus, 100-150 μ longis, plus minusve infuscatis; cellula praebasali semper brevi et tota vel magna pro parte nigra, basali autem plus minusve elongata sed saepius brevi et pallida.

Hab. in *Brachyni* sp. ind. (aff. *B. equestri*), Bolama, Guinea lusitan. (L. FEA). — *L. afræ* Speg. affinis sed bene distincta.

116. *Laboulbenia rigidula* Speg., Laboulb. Arg. p. 600 fig. 132. — Eu- 4080

laboulbenia, melanopsallia, apodotheca, eleutherocarpa, tota e fusco-olivascens nigrescens, mediocris, elongata, angusta, vix arcuata, rigidula, cellulis III et IV parallelis subaequilongis, IV plus minusve nigrescente dorso prominulo-subgibbosa, V majuscula apicem internum tertiae attingente, septima parva saepius subatrophica, perithecio ad basim usque libero subfusoides atro, per aetatem subopaco sursum in umbone ostiolarum hyalino. hypostomum nigro, obtuso productum, cellulis inferis paraphysum majusculis subtorulosis plus minusve infuscato-nigrescentibus, paraphysibus fumosis.

Hab. in elytris *Zygogrammae aureolineae*, Misiones Argent. (C. BERG). — Perith. 99-100 \times 28-30; alt. tot. 250-275 μ .

117. *Laboulbenia Rougeti* Robin — Syll. VIII p. 910 — **L. Callisti* Speg. 4081

Laboulb. ital. I, in Redia X p. 64 (1914) tab. IX fig. 60, et in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 497. — Macromastiga. Statura conspicue minore, gracilitate omnium partium, receptaculo elongato, ostiolo crassissimo obtusoque, axi paraphysario primario toto nigrificato a typo recedit. Alt. 225-275 μ , perith. 75-85 \times 25-35, paraph. 200-250 μ long.

Hab. in *Callisto lunulato* nec non in *Platyno dorsali* in Italia, et in *Europhilo dorsali* ex Morea.

- * *L. chlaeniicola* Speg., l. cit. p. 65, tab. IX fig. 61. — Differt receptaculo elongato perithecio duplo triplove longiore, paraphysopodio e cellulis basalibus æxeis primarii non vel vix nigrifactis. Alt. 400-500 μ , perith. 100 \times 50, paraph. 300-350 μ alt. 4082

Hab. in *Chlaenio nitidulo*, prope Romam, Ital. centr.

- * *L. fuscescens* Speg., l. cit. p. 65, tab. IX fig. 62. — Statura minore, colore saturatiore castaneo-atro et perithecio magis libero distincta. Alt. 200-225 μ ; perith. 110 \times 50, paraph. 100-150 μ alt. 4083

Hab. in *Agono Mülleri*, prope Romam Ital. centr.

- * *L. sicula* Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires, XXVII p. 61 fig. 26. — Erecta, 350-400 μ alta; receptaculo pallido, pellucido, conoideo; androsticho atque gynosticho normalibus, connatis, inferne subpurpureo-fuscis, superne atris opacis; perithecio cylindraceo-conoideo, 150-175 \times 65-70, grosse umbonato, oblique truncato-ostiolato, nigro; paraphysopodio et axi paraphysario primario infuscato, antheridiopodio ac ejusdem paraphysibus subhyalinis. 4084

Hab. in *Brachyno bellicoso*, Trapani, Sicilia et prope Tunisi, Afr. bor.

118. *Laboulbenia Bolamae* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1913) p. 500 fig. 42. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, fusco-mellea, mediocris, 250-300 μ alta; cellula quarta seu supera androstichi superne eximie truncata, angulo dorsali recto acuto prominulo; perithecio pro ratione majusculo, subcylindraceo, 100 \times 30, grosse umbonato-ostiolato, hypostomo atro, ostiolo obliquo, labiis subhyalinis, apendice trichogynica persistente longiuscula; paraphysibus filiformibus sat copiosis, 250-350 μ longis. 4085

Hab. in *Feronideo* majusculo brunneo indet.; Bolama, Guinea lusitan. (L. FEA). — Ad typum *L. flagellatae* Peyr. pluribus characteribus vergit sed androsticho eximie truncato etc. distincta.

119. *Laboulbenia Peiroleri* Speg., Laboulb. ital. I, in Redia X p. 61 (1914) tab. VIII fig. 57. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, macromastiga, mediocris, 325-350 μ alta, fusca, receptaculo modice conico, pallido; perithecio atro opaco, 150-175 \times 60-70, deorsum breviter androsticho adnato, apice ostiolo obtusissimo crassissimo leniter obliquo donato; paraphysibus paucis, flaccidis, subcrassiusculis, 300-350 μ longis, e basi sursum leniter sensim incrassatis, apice obtuse rotundatis atque plus minusve arcuatis, rufescentibus. 4086

Hab. in *Platyno (Anchomeno) Peiroleri*, Val

Pesio, Pedem. Ital. bor. — * *L. helvetica* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 496 fig. 38. — Statura duplo majore, oligomastiga, 400-500 μ , paraphysibusque minus incrassatis et minus flaccidis a typo recedit. — Perith. 200 \times 70; paraph. 400-600 \times 25. — *Hab.* in *Anchomeno depresso*, ex alpibus Helvetiae.

120. *Laboulbenia philonticola* Speg., Laboulb. ital. I, in Redia X p. 61 4087 (1914) tab. VIII fig. 58. — Eulaboulbenia, haploctya, melanopsallia, apodotheca, malacochaeta, macromastiga, androsticho basi peritheci brevisiter adnato, paraphysopodio et andropodio mediocribus, subglobosis, ostiolo peritheci parum prominulo, obliquo, subbilabiato, paraphysibus dense breviterque ramosis, externo plus minusve infuscato, cellula praebasali percrassa tumida. Alt. 300-375 μ , perith. 100 \times 50, paraph. major. 100-150 μ altis.

Hab. in *Philontho* sp., Levico, Trentino. — Affinis *L. Rougeti* Rob. sed colore saturatiore aliisque characteribus distincta.

121. *Laboulbenia Stenolophi* Speg., Laboulb. ital. I, in Redia X p. 65 4088 (1914) tab. IX fig. 63, et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 505, XXVII (1915) p. 61. — Eulaboulbenia, haploctya, melanopsallia, apodotheca, malacochaeta, macromastiga, tota melleo-subhyalina, brevis, crassa, 275-350 μ alta, perithecio 100-125 \times 60, ostiolo umbonato obliquo, hypostomo nigro, paraphysopodio crasso globoso; paraphysibus crassis, fumosis, majoribus 400 μ usque longis.

Hab. in *Stenolopho tentorio*, prope Coneglanum, Venet., prope Bononiam Ital. bor., nec non prope Bagnères, Gallia. — Affinis *L. Giardi* Cép. et Pic. et *L. polyphagae* Thaxt.

122. *Laboulbenia obesula* Speg., Laboulb. Arg. p. 655 fig. 181, *L. olivacea* Speg., Contr. Lab. Arg. n. 48 fig. 54 (non Thaxt.). — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa malacochaeta, macromastiga, tota olivacea, hinc inde irregulariter obscurior saepeque opaca, partibus omnibus ad maturitatem plus minusve tumidulis, peritheciis ad medium fere usque androsticho adlatis cellula 4. dorso sub psallio conspicue angulato-gibbosula, andropodio pallido parvo, paraphysopodio nec non cellulis una v. duabus basilaribus axeos majusculis subglobosis pallidis, paraphysibus crassiuscule filiformibus quandoque pallidis quandoque fusco-olivaceis.

Hab. in elytris *Carabinei* sp. (*Lebia*?), Tucuman Argent. — Perith. 100-150 \times 50-70; alt. tot. 300-500 μ .

123. *Laboulbenia vulgaris* Peyr. — Syll. VIII p. 912 — * *L. oncagone* Speg., 4090

Laboulb. ital. I, in Redia X p. 43 (1914) tab. III fig. 27. — Monomastiga. A typo recedit cellulis basali et praebasali, medio eximie coarctata, subaequilongis, septo primo valde tumefacto fumosoque, ceteris normalibus sed (quinta praecipue) infuscatis, perithecio ad medium fere usque androsticho adnato, deorsum fuscescente subopaco sursum pallidiore, attenuato ac in umbone bene evoluto, crasso, oblique ostiolato producto; andropodio septo nigro crasso coronato. — Alt. 220-250 μ ; perith. 75×32 ; paraph. 150 μ alta.

Hab. in *Bembidio quadriguttato*, prope Romam, Ital. centr. — Affinis *L. subterraneae* Thaxt. et *L. pedicellatae* Thaxt.

- * *L. scalisca* Speg., l. cit. p. 44 tab. IV fig. 28. — A typo recedit brevitate et crassitudine corporis, cellulis basali et praebasali pallidis, ceteris atris opacis, perithecio late elliptico, medium fere usque androsticho adnato, subnigro, opaco, umbone non vel vix pallidiore et pellucido coronato, paraphyse solitaria simplici, articulis cuboideis vel subglobosis efformata, antheridiophoro unicellulari. — Alt. 150-170 μ ; perith. 75×35 .

Hab. in *Bembidii* sp. plur., in Italia.

- * *L. trechiphila* Speg., l. cit. p. 45, tab. IV fig. 29. — A typo distinguitur cellula praebasali superne sub tertia nonnihil producta, androsticho perithecio longiuscule adnato, partibus omnibus pallidis, mel-leis vel funosis. — Alt. 185-200 μ ; perith. 80×35 .

Hab. in *Trechobinotato*, prope Florentiam Ital. centr.

- * *L. communis* Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 63 fig. 28. — Eulaboulbenia, monomastiga. A typo recedit stipite cylindraceo, ad septum primum vix constricto, non infuscato, cellulis caeteris receptaculi leniter obsoleteque transverse rugulosis et praecipue paraphyse percrasso, vix apice breviter parceque appendiculato

Hab. in *Bembidii* sp. indet., prope Genuam, Ital. bor.

- * *L. subcommunis* Speg., loc. cit. p. 63. — A *L. communi* recedit cellula basali parva hyalina, praebasali majuscula turbinata, ramis apicalibus paraphyseos monomeris percrassis, colore obscuriore, subnigro.

Hab. in *Bembidii* sp. ind., prope Genuam, Ital. bor.

- * *L. subvulgaris* Speg., l. cit. p. 64 fig. 29. — A typo recedit praecipue paraphysopodio maximo, elliptico-subgloboso, $30 \times 20-25$, medio saepius leniter coarctatulo, paraphyse fere nullo, ad cellulam tantum reducto.

Hab. in *Bembidii* sp., prope Coneglianum, Ven., It. bor. —
An species distincta?

- **L. trivialis* Speg., l. cit. p. 64 fig. 30. — A typo recedit pedicello me- 4096
dio valide tumefacto, cellula praebasali nec non illis androstichi
et gynostichi eximie transverse nigro-maculatis, paraphysopodio
mediocri subgloboso in paraphyse brevissimo parce crasseque ra-
moso producto.

Hab. in *Bembidii* sp., prope Imola, Ital. bor.

- **L. suboncogona* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos 4097
Aires XXVI (1925) p. 489 fig. 32. — A *L. oncogona* Speg. recedit
articulatione septi primi minus turgida et praecipue constrictione
ejusdem deficientia, peritheciocque breviori, longius androsticho ad-
nato. Alt. 250-275 μ ; perith. 90 \approx 35.

Hab. in *Bembidio laevigato*, Columbus, Texas, Ame-
rica bor.

124. *Laboulbenia polyphaga* Thaxt. — Syll. XIV p. 734. — **L. phaeo-* 4098
soma Speg., Laboulb. Arg. p. 616, fig. 147 b. — Eulaboulbenia, me-
lanopsallia, apodotheca, hemisyncarpa, malacochaeta, monomastiga,
cellula I subhyalina, III pallide fumoso-testacea, gynosticho an-
drostichoque obscure testaceo-fuligineis laxae v. plus minusve dense
asperulo-punctulatis, perithecio atro-testaceo laevi subopaeo saepius
dorso sub hypostomo pallidiore, paraphyse crassa elongata hyalina.

Hab. in toto corpore *Carabidorum* quorundam (*Argu-*
tor, *Argutoridius*, *Pterostichus* etc.), Montevideo, Sta
Catalina B. A., La Plata. — Perith. 80-90 \approx 32-35; recept. 115-
125 \approx 40-45; alt. tot. 200-210 μ . — **L. calathicola* Speg., Laboulb. ital.
I, Redia X p. 39 (1914) tab. III, fig. 20. — Monomastiga. A typo re-
cedit colore infusato, praecipue ad perithecium, umbone ostiolarum
dorso minus tumido, hypostomo toto nigro, ostiolo valde obliquo.
Alt. 175-250 μ ; perith. 85-110 \approx 30-50; paraph. 200-250 μ alta. —
L. vulgari proxima.

Hab. in *Calatho microptero*, prope Romam, C. melano-
cephali et *C. fuscipede*, in Veneto.

125. *Laboulbenia Bergiana* Speg., Laboulb. Arg. p. 609, fig. 143. — 4099
Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malaco-
chaeta, monomastiga; tota pallidissime mellea, psallio hypostomoque
nigris exceptis; cellula VII receptaculi trigonosegmentiformi parva;
cellulis IV et V tumidis a perithecio elliptico-ovato, longitudina-
liter 4-vittato inclinato, obsolete umbonato-ostiolato divergentibus;
paraphyse subhyalina solitaria praelonga deorsum subtorulosa, an-

dropodio aethroo monoantheridiato.

Hab. in toto corpore *Phinophili* Bergi, La Plata.— Perith. 125-40 \times 60-65; recept. 200-230 \times 65-75; alt. tot. 300-325.

126. *Laboulbenia cymindicola* Speg., Laboulb. ital. I, in Redia X p. 37 4100 (1914) tab. III fig. 17. — *Eulaboulbenia*, haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, 225-250 μ alta, colore fumoso-rubiginoso, protoplasmate grumoso-granuloso, cellulis basali et praebasali elongatis, subcylindraceutis, pallidis; androsticho brevissimo infuscato; perithecio turgidulo, subnigrescente, 100-110 \times 45-50, crasse breviterque umbonato, ostiolo valde obliquo, hypostomo atro, labiis subhyalinis; paraphyse solitaria simplici, crassiuscula, 150-175 μ alta; ramulis antheridialibus numerosis, abbreviatis, gracilibus, penicillatim constipatis.

Hab. in *Cyminde coadunata*, prope Romam It. centr.— Inter. *L. polyphaga* Thaxt. et *L. Rougeti* Rob. media.

127. *Laboulbenia lathropinicola* Speg., Lab. Arg. p. 613, fig. 145. — *Eulaboulbenia*, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, monomastiga; tota olivacea, cellulis I et II subaequilongis pallidioribus, androsticho apice fuscescente breviter libero deorsum perithecii basi adnato, paraphyse solitaria crassiuscula longiusculaque subhyalina, andropodio brevi simplice biantheridiato, perithecio inclinato superne longe nigro-umbonato, ostioli labiis tumidis rotundatis modice hiantibus.

Hab. in elytris *Lathropini majoris*, Santa Fè Arg.— Perith. 125-130 \times 50-55, alt. tot. 290-310.

128. *Laboulbenia pulchella* Speg., Laboulben. ital. I, in Redia X p. 39 4102 (1914) tab. III fig. 21 et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 488. — *Eulaboulbenia*, haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, parvula, 125-150 μ alta, fuscescens, abbreviata, latiuscula, obconica; cellulis secunda, tertia et quarta secus marginem dorsalem plus minusve infuscatis; perithecio breviter ellipsoideo-conico, 60-65 \times 30-35, subpallido, ostiolo bene evoluto, obliquo, labio supero nigrifacto, paraphysum axi primario simplice, elongato, crassiusculo, articulato, 75-100 μ long., vix fumoso, axi antheridiophoro brevissimo, dense tenuiterque penicillatim ramosulo.

Hab. in *Dromio lineari* prope Neapolim, It. merid. nec non in *Dromio sigma* et *D. quadrinotato*, in Germania. — **L. major* Speg., loc. cit. p. 40, tab. III fig. 22. — A typo differt magnitudinem omnium partium majore (alt. 160-175 μ , perith.

75 \times 40, paraph. 125 μ alta) et colore magis infuscato.

Hab. in *Metableto* (Blechro) foveolato in Tyrolia.

129. **Laboulbenia Blanchardi** C. Cépède, *Archiv. de Parasitologie* t. 16., 4103
1913, p. 373, tab. VI (diagn. nulla).

Hab. in *Carabide Demetrias unipunctata*, prope Wimerex, Pas-de-Calais, Gallia. — *Lab. Casnoniae* Thaxt. proxima. —
Sec. Picard (*Bull. Scient. France Belgique* t. 50., 1916-1917, p. 453)
eadem est ac *Lab. pulchella* Speg.

130. **Laboulbenia gracilis** Speg., *Laboulb. ital.* II, in *Anal. Mus. Nac.* 4104
Buenos Aires XXVII (1915) p. 54, fig. 21. — Eulaboulbenia haplo-
cytia, melanopsallia, apodotheca, malacochaeta, monomastiga, me-
diocris, elongata, 250-500 μ alta, fuscula; cellula basali abbreviata,
obconico-cylindracea, 30-60 \times 15, praebasali longissima, 150-300 \times 20,
plus minusve infra medium angustata sed utrimque leniter tumi-
dula; androsticho normali superne infuscato; psallio parvo nigro;
paraphysopodio nec non antheridiopodio pro ratione parvis, in pa-
raphyse brevi simplici productis; gynosticho normali; perithecio
atro, subopaco, elongatulo, 80-100 \times 20-25, gracili, rectiusculo, a
quarto infero libero, sursum modice attenuato, ostiolo crasso, ob-
tusos, oblique subtruncate coronato.

Hab. in *Sunii* sp. indet., prope Coneglanum, Ven., Ital. bor. —

L. Philonthi proxima sed bene distincta.

131. **Laboulbenia planeticola** Speg., *Laboulb. Mus. ital.*, in *Anal. Mus.* 4105
Nac. Buenos Aires XXVI (1915) p. 487, fig. 30. — Eulaboulbenia,
haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga,
subparva, 210-220 μ alta, atrata; cellulis basali et praebasali sub-
aequilongis, gracilibus, pallidis pellucidisque; perithecio crasso,
subovato, 75-85 \times 35-40, grosse et oblique umbonato-ostiolato, an-
drosticho brevissime adnato; paraphyse primario praelongo, 250-
300 μ attingente, gracillimo, ramulis 2 v. 3 etiam gracilibus lon-
gissimis ornato.

Hab. in *Planete bimaculato*, Bhamò, Birmania (L. FEA). — *L. vulgari* affinis sed paraphyse longissima gracillique sa-
tis distincta.

132. **Laboulbenia Sebethes** Speg., *Laboulb. Mus. ital.* in *Anal. Mus.* 4106
Nac. Buenos Aires XXVI (1915) p. 488, fig. 31. — Eulaboulbenia,
haphocytia, melanopsallia, apodotheca, malacochaeta, monomastiga,
parvula, 125-175 μ alta, castaneo-fusca, geminata, altera fertilis,
altera saepius abortiva; androsticho et gynosticho parvis; perithecio
pro ratione magno, 65 \times 25, atro, crasse obtusissimeque umbo-

nato, umbone oblique albo-ostiolato; paraphyse elongato, 150-200 μ , flaccido.

Hab. in Sebethelusca, Aiè-mantecior, Sumatra (O. BECCARI).

133. *Laboulbenia stillicicola* Speg., Laboulb. ital. I, in Redia X p. 41 4107
(1914) tab. III, fig. 23. — *L. subterranea* Thaxt. p. p. — (Monomastiga). Parvula gracilis, elongata, 175-250 μ alta, cellula basali prima brevissima conica, praebasali secunda quadruplo longiore cylindrica, pallidis, articulatione septi primi non tumefacta; perithecio atro, subopaco, ad tertium inferum usque androsticho adnato, gracili, elongato, 70-90 \times 20-22, ostiolo attenuato-umbonato valde obliquo; paraphyse solitaria, simplice, 150-175 μ longa, a basi ad medium sensim crassiore, articulis paulatim brevioribus et magis infuscatis.

Hab. in Stilicco fragili, prope Levico Trentino. — A *L. subterranea* Thaxt. typica, plurimis notis bene distincta.

134. *Laboulbenia sigmoidea* Speg. — Syll. XXII p. 15. — * *L. crucifera* 4108
Speg., Laboulb. Arg. p. 638, fig. 168 b. — *Eulaboulbenia*, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, majuscula, hyalina v. pallidissime mellea, perithecio rectiusculo umbone nigro ostioloque hyalino donato, paraphysopodio achroo in axi primario fumoso recto erecto crassiusculo, saepius ramululo ventrali ornato, producto, andropodio ramulis 2 horizontaliter divaricatis 1-antheridiatis coronato.

Hab. rarius in abdomine, inter trochanteres, *Argutoris confusi*, Montevideo, et *Arg. bonariensis*, Sta Catalina. B. A. Argent. — Perith. 120-135 \times 48-52; alt. tot. 250-400 μ .

135. *Laboulbenia rugulosa* Speg., Laboulb. Arg. p. 637, fig. 167. — *Eulaboulbenia*, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, tota lateritio-umbrina, androsticho gnosticoque obscurioribus fere opacis ac transverse dense atro-rugosis, perithecio pro ratione majusculo elliptico-ovato intense colorato, saepius lineis longitudinalibus 4-nigris tenuibus subrectis notato, obesulo, recto v. lenissime deorsum, subarcuato, basi breviter androsticho adnato, apice modice umbonato, ostiolo vix obliquo et hiante, labiis hyalinis, hypostomo dorso tantum nigrefacto, paraphysibus paucis plus minusve ochraceis subbrevibus.

Hab. in elytris *Argutoris bonariensis*, La Plata. — Perith. 140-150 \times 70-75; alt. tot. 250-350 μ .

136. *Laboulbenia hiemalis* Speg., Lab. Arg. p. 628, fig. 159. — *Eulaboulbenia*, melanopsallia, apodotheca, hemisyncarpa, malacochaeta,

oligomastiga; parvula fere tota olivacea, cellula basali hyalina, paraphysopodio cellulisque axeos primarii e latere dorsali nigro-marginatis, e latere ventrali nudis v. filamentis paucis tenuibus ornatis, perithecio subelliptico sursum attenuato-umbonato, ostiolo obliquo minuto, dorso hypostomi nigro.

Hab. vulgata in toto corpore *Anthonomi* sp., La Plata. — Perith. $45-50 \times 18$; alt. tot. $90-110 \mu$.

137. *Laboulbenia oedipus* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4111
Buenos Aires XXIII (1912) p. 222 fig. 52. — Parvula, $100-200 \mu$ alta, fusco-mellea, melanopsallia, oligomastiga; cellula secunda receptaculi percrassa et tumida; peritheciis ellipsoideo-elongatis, $70-90 \times 20-38$, ad medium fere usque parte distali adnatis, ostiolo obsolete retuso, subobliquo, exappendiculato; paraphysibus solitariis vel geminis, mox articulatim deciduis.

Hab. in Trecho laevigato, La Plata, Argentina.

138. *Laboulbenia Missionum* Speg., Laboulb. Argent. in Anal. Mus. 4112
Nac. Buenos Aires XXIII (1912) p. 220, fig. 50. — Parvula. $150-250 \mu$ alta, hyalina, melanopsallia, oligomastiga; peritheciis subcylindraceis, 120×30 , parum ostiolum normale infra usque, pleurogene parte distali adnatis; paraphysibus gracilibus elongatis.

Hab. in Carabide quodam (*Feroniomorpha*?), Puerto Bertoni, Misiones, Paraguay, Amer. austr. — *L. barbatae* Thaxt. et *L. Morionis* Thaxt. affinis.

139. *Laboulbenia platensis* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4113
Buenos Aires XXIII (1912) p. 230, fig. 61. — *Mediocris* $250-400 \mu$ alta, tota mellea, melanopsallia, oligomastiga; peritheciis late ellipsoideis, $100-110 \times 50-60$, ad apicem fere usque parte distali adnatis, ostiolo obtuso, brevi, exappendiculato, fuscescens; paraphysibus binis, brevibus, crassis; receptaculo subgracili, elongato, extorsum saepe leniter incurvato.

Hab. in Brachyno bilineato, La Plata, Argentina.

140. *Laboulbenia Blechri* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4114
Buenos Aires XXIII (1912) p. 199, fig. 27. — *Fuscidula*, parvula, $120-150 \mu$ alta, melanopsallia, oligomastiga; paraphysibus inferne fusciscentibus; peritheciis elongatis, subtorulosis, $50-60 \times 25$, ad quantum inferum usque parte distali adnatis, ostiolo-obtuso pleurogene vel oblique dehiscens; antheridiis non vivis.

Hab. in Blechro platensi, La Plata, Argentina.

141. *Laboulbenia leptostoma* Speg., Laboulb. Argent. in Anal. Mus. 4115
Nac. Buenos Aires XXIII (1912) p. 217, fig. 47. — *Pusilla*, 300μ

circ. alta, subhyalina, melanopsallia, oligomastiga; peritheciis sub-ellipsoideis, 160×65 , basi breviter parte distali adnatis, apice in ostiolo 1-labiato, $30 \times 10 \mu$, labio cochleato productis; paraphysibus paucis hyalinis

Hab. in *Bembidio* indeterminato, La Plata, Argentina.

142. *Laboulbenia stolonicola* Speg., Lab. Arg. p. 640, fig. 169. — Eu. 4116

laboulbenia, melanopsallia, apodotheca, hemisyncarpa, oligomastiga, elongata, gracilis, pallide straminea, androsticho gynosticho nec non peritheciis parte infera fumosis, perithecio subcylindraceo-elliptico dorso convexulo ventre plano v. vix concaviusculo, hypostomo nigro antice impresso lineola nigra horizontali eximie limitato, ostiolo obliquo labiis rotundatis, andropodio minuto, paraphysopodio subcylindraceo sat elongato, paraphysibus geminis e cellula basilaris oriundis hyalinis praelongis tenuibus.

Hab. in toto corpore *Stolonis fulvostigmatis*, Sta Catalina B. A. Argent. — Perith. $80-90 \times 30-32$; alt. tot. 200-225 μ .

143. *Laboulbenia Galeritæ* Thaxt. — Syll. XIV p. 732. — * *L. pseudodeci-* 4117

piens Speg., Lab. Arg. p. 593, fig. 126 g.; *L. decipiens* Speg. non Thaxt. Contr. Lab. arg. n. 37, F. — Eulaboulbenia, melanopsallia, podocarpa, malacotricha, subdichroma; parvula, olivacea, cellula basalis et pedicello brevi peritheciali hyalinis, cellula II lata brevique aequaliter eximie triangulari-pentagona, septis receptaculi omnibus obliquis perithecio elliptico-cylindraceo, saepius lineis 4-dextrorsis ornato vix umbonato-ostiolato, hypostomo non v. parce infuscato, paraphysibus tennibus numerosis.

Hab. in elytris *Galeritæ Lacordairei*, Salta et Jujuy Arg. — Perith. tot. $90-105 \times 28-40$; alt. total. 190-225 μ .

- * *L. subbicolor* Speg., l. c. p. 595, fig. 126 j. — Eulaboulbenia, mel- 4118

nopsallia, podocarpa, malacotricha, subdichroma. A *L. bicolore* Thf. recedit cellulis II et III atris opacis indistinctis marginem dorsalem receptaculi efformantibus, IV et V pro parte tantum nigrefactis atque bene perspicuis, gynosticho pallido, pedicello peritheciali breviusculo, perithecio lineis longitudinalibus tennibus dextrorsis notato ac paraphysibus brevioribus gracilioribusque.

Hab. in margine inf. abdominis *Galeritæ ruficollis*, Salta Arg. (RICHTER). — Perith. $140-150 \times 42-45$; alt. tot. 285-300 μ .

144. *Laboulbenia erectiuscula* Speg., Laboulb. Arg. p. 580, f. 116 a. — 4119

Eulaboulbenia, paralaboulbenia, ceratotheca, apodotheca hemisyncarpa, malacochaeta, oligomastiga; major, fere erecta, hinc inde

fumosa, rostro ostioli subteguliformi donato.

Hab. in thorace *Argutoris confusi*, Montevideo, Sta Catalina et La Plata. — Perith. tot. 105-115 \approx 45-48; alt. tot. 200-300 μ .

145. *Laboulbenia leptostomoides* Speg., l. c. p. 581, fig. 116 b. — Eula- 4120
boulbenia, paralaboulbenia, ceratotheca, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; mediocris incurvata, cellulis I et II hyalinis, ceteris receptaculi fumosis, perithecio obscuriore lineis longitudinalibus 4 nigris cruciatis notato, sub hypostomo pallidiore, ostiolo cochleato ut in typo, hypostomo ventre tantum nigrifacto, psallio parvo, paraphysibus saepius binis fumosis parce breviterque ramuligeris.

Hab. in thorace *Argutoris confusi*, Montevideo. — Perith. tot. 120-125 \approx 56-60; alt. tot. 200-250. — Cum praecedenti, *Lab. leptostomae* Speg. cognata.

146. *Laboulbenia funerea* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4121
Buenos Aires XXIII (1912) p. 208, fig. 37. — Parva, 250 μ circ. alta, tota atro-fusca, melanopsallia, oligomastiga; peritheciis late subcylindraceutis, 100 \approx 30, parte distali vix ima basi adnatis, ostiolo brevi, obtuso, crassiusculo, integro, exappendiculato; paraphysibus paucissimis, brevibus, mox evanidis.

Hab. in *Anaedo carioso*, S. Catalina, Argentina.

147. *Laboulbenia tittephora* Speg., Laboulb. Arg. p. 577, fig. 114. — 4122
Eulaboulbenia, paralaboulbenia, theletheca, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, elongata, gracilis, fumoso-flavescens, cellulis II e III, saepe IV etiam, grosse granulosis, perithecio angusto, ad medium papillis duabus horizontalibus fuscis ornato, hypostomo coarctato nigro ad ventrem foveolato-impresso, ostiolo, obtuso obliquo, labiis conniventibus hyalinis, paraphysibus paucis chlorinis.

Hab. in elytris *Harpalidei* sp. indet., Jujuy Argent. — Perith. 80-96 \approx 28-30; alt. tot. 250-350.

148. *Laboulbenia Tachyis* Thaxt. — Syll. XVIII, p. 920. — * *L. diversipes* 4123
Speg., Laboulb. Arg. p. 642, fig. 171 a. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; a typo cellulis basali et praebasali magnitudine summopere ludentibus, perithecio paraphysibusque brevioribus crassioribusque distincta.

Hab. in artubus *Tachyis corruscantis*, La Plata Arg. — Perith. 60-80 \approx 22-28; alt. tot. 100-300 μ . — * *L. subbitubercu-*

lata Speg., Lab. Arg. p. 644, fig. 171 b. — Eulaboulbenia, melanopsallia apodotheca, hemisyncarpa, malacochaeta, oligomastiga, elongata, gracilis, paraphysopodio dorso gibbuloso, cellulis una v. duabus basilaribus axium subglobosis nigro-septatis, perithecio obscure fumoso ad medium leniter angulato-subgibboso atque, andropodium contra, macula parva orbiculari fusca notato.

Hab. in elytris *Tachys?* sp., La Plata et Montevideo. — Perith. 70-75 \times 18-20; alt. tot. 180-220 μ ,

149. *Laboulbenia distinguenda* Speg., Lab. Arg. p. 621, fig. 153. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, melanochaeta, oligomastiga, tota plus minusve pallide olivascens, paraphysopodio nec non cellulis inferis axeos paraphysarii primarii olivascens, dorso nigro-marginatis, superficie totius receptaculi, cellula basali excepta, transverse dense minuteque papilloso rugulosa, perithecio elongato-ovato normali. 4124

Hab. in elytris *Carabidorum* quorundam ind., Salta et La Plata Argent. — Perith. 75-85 \times 35-40; alt. tot. 175-225 μ .

150. *Laboulbenia Richteri* Speg., Lab. Arg. p. 636, fig. 166. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, pallidissime mellea, elongata, gracilis, dorsum versus leniter arcuata, septo 2 valde obliquo, cellulis totius receptaculi dense minuteque transversim rugulosis, perithecio elongato-fusoides, umbonato-ostiolato, hypostomo nigro, labiis ostiolaribus conniventibus obtusis hyaliniis, paraphysibus, subbrevis, paraphysopodio nec non axeos paraphysarii cellulis inferis dorso nigro-marginatis. 4125

Hab. in elytris minuti *Carabidei* (*Pterostichus?*), Salta Argent. — Perith. 90-110 \times 32-36; alt. tot. 275-325.

151. *Laboulbenia argyropotamica* Speg., Laboulb. Arg. p. 598, fig. 129. — Eulaboulbenia, melanopsallia, apodotheca, eleutherocarpa malacochaeta, oligomastiga, subparva, tota olivacea, septis 1, 2 et 3 valde obliquis, perithecio cylindraceo-subfusoides ab ima basi libero sursum in ostiolo obtusiusculo hyalino, hypostomo nigro, attenuato, androstichi parte supera libera, paraphysopodio brevissimo paraphyses geminas 5-6-meras, septis nigras coarctatulas fulcente, andropodio minimo 1-antheridiato. 4126

Hab. in elytris *Clivinae longipennis*, in insula Santiago, La Plata. — Perith. 80-110 \times 28-30; alt. tot. 150-200 μ .

152. *Laboulbenia flagellata* Peyr. — Syll. XIV p. 731 — * *L. gracilis* Speg., Laboulb. ital. I, in Redia X, p. 51 (1914) tab. VI fig. 39. — 4127

(Oligomastiga). Forma sat pallida et pellucida 175-200 μ alta, pro ratione gracilis et elengans, tuberculo ostiolarum valido, hypostomo nigro, ostioli labiis hyalinis, perithecio normali, 70-75 \times 30, basi ad tertium usque androsticho adnato, paraphysibus paucis elongatis, 150-300 μ longis.

Hab. in *Ophono maculicorni*, prope Coneglianum, Ital. bor.

- * *L. harpalicola* Speg., l. c. p. 52, tab. VI fig. 40. — Differt a typo habitu magis elongato, paraphysopodio et andropodio non incrassatis, peritheciis magis rotundatis, pallidioribus pellucidisque. Alt. 225-250 μ , perith. 75-80 \times 35-40, paraph. major. 200 μ alta. 4128

Hab. in *Anchomenido* indeterminato, Roma, et in *Harpalo aeneo*, in silva Cansiglio prope Tarvisium, It. bor.

- * *L. pseudoflagellata* Speg., l. cit. p. 52, tab. VI fig. 41. — A typo recedit habitu crassiore breviorisque atque umbone ostiolarum brevi obtuso, hypostomo non infuscato, labiis subdenticulatis et peritheciis lenissime dextrorsum tortis. — Alt. 175-200 μ ; perith. 60 \times 35. — Affinis etiam *L. polyphagae* Thaxt. 4129

Hab. in *Abaceto Salzmanni* in Sardinia, et *Pogono littorali*, in Apulia, Ital. austr.

- * *L. romana* Speg., l. cit. p. 53, tab. VI fig. 42. — Forma satis infusca, receptaculo angusto, cellulis prima et secunda subaequilongis, androsticho superne tumido et dorso subgibboso recedens. — Alt. 150-200 μ , perith. 65-70 \times 25, paraph. 150-200 μ alt. 4130

Hab. in *Ophono planicollae* et *O. mendace*, Roma, Ital. centr.

- * *L. strictipes* Speg., l. c. p. 53, tab. VI fig. 43. — A typica recedit colore melleo pallido, umbone peritheciali brevi, late rotundato, hypostomo nigro ostioloque hyalino sed praecipue cellula basali dimidia infera cylindrica, dimidia supera abrupte turbinosa. — Alt. 150-175 μ ; perith. 75-80 \times 30-35, paraph. 120-200 μ alt. 4131

Hab. in *Laemostenide algerino*, prope Sassari, Sardinia.

- * *L. paranensis* Speg., Lab. Arg. p. 625, fig. 155 c. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; majuscula, subhyalina, perithecio ellipsoideo dorso valide incurvo superne fere subgibboso apice abrupte oblique rotundato, umbone brevi nigro, labiis ostiolaribus obtusis coronato, paraphysopodio andropodioque hyalinis parte infera paraphysum pallide olivacea. 4132

Hab. in toto corpore *Parameci cylindrici*, Paraná, Entre Ríos (J. MAC DONAGH).

- * *L. anysodactylica* Speg., Lab. Arg. p. 623, fig. 155 a. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, submajuscula, tota pallidissime straminea, receptaculo elongato angusto, cellula IV sub psallio truncata atque dorso angulato-prominente, perithecio valido umbonato, hypostomo nigro ad ventrem impresso-subfoveolato, labiis ostioli obliqui prominulis rotundatis, paraphysibus paucis hyalinis. 4133

Hab. pervulgata in toto corpore *Anysodactyli cupripennis*, Montevideo, Salta, Tucumán, Catamarca, Córdoba, Buenos Aires, La Plata. — Perith. 85-120 × 22-35; alt. tot. 200-500 μ.

- * *L. lepidioides* Speg., Rev. Lab. arg. p. 624, *L. lepida* Speg. (non Thaxt.) Contr. Lab. Arg. p. 40, fig. 46. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, cellulis I et II hyalinis, ceteris paraphysibus ac praecipue perithecii parte infera chlorinis, cellula II inflatula, perithecio elliptico elongato erecto, paraphysopodio majusculo andropodioque parvulo. 4134

Hab. in elytris *Harpali sulcatuli*, Misiones, Rep. Arg. — Perith. 100-110 × 35-40; alt. tot. 300-400 μ.

- var. *Bordei* Maire, Bull. Soc. Hist. nat. Afrique du Nord IV n. 9, p. 2, tab. II fig. 6-8 (1912). — A typo speciei maxime variabilis non differt nisi ascosporis brevioribus et angustioribus, 50-52 × 4-5. 4135

Hab. in *Harpalo tenebroso*, Coleopt., Agoulmine-Aberkane in Afkadou, Africa bor. (R. DE BORDE).

153. *Laboulbenia algerina* Speg., Laboulb. ital. I, in Redia X p. 45 (1914) tab. IV fig. 30 et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 489. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, a *L. flagellata* Peyr. turgiditate cellulae quartae androstichi, crassitudine majore, ostiolo magis rotundato recedens, colore autem rufescente *L. Rougeti* Rob. accedens, sed cellulis inferis axeos paraphysarii primarii paraphysopodioque non atratis distincta. — Alt. 200-300 μ; perith. 100-115 × 45-65; paraph. 200-250 μ alt. 4136

Hab. in *Pristonycho algerino* in Italia (Latium, Sardinia) et in Africa bor. (Tunisia), nec non in *Pr. hepatico*, Teheran, Persia.

154. *Laboulbenia paupercula* Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires, XXVII (1915) p. 59 fig. 25. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, 4137

parva, 220 μ alta, pallida; cellulis basali et praebasali elongatis, subcylindræis; androsticho brevi crassoque, cellula tertia maxima, quarta minima, psallio angusto, atro, parum distincto coronato; gynosticho normali, cellula decima turgida et valde prominula; perithecio ad quartum inferum tantum androsticho adnato, subfusoides, 80 \times 25, ventre inflatulo, superne elongatulo, in ostiolo parum obliquo subhyalino producto; paraphysopodio gibboso, noduloso, atro, opaco; antheridopodio majusculo, atro, parum distincto; paraphysibus paucis, brevibus, penicilliformibus.

Hab. in *Tachyis* sp. indet., Roma, Ital. centr. — Affinis *L. Tachyis* Thaxt. et *L. Blechri* Speg. sed distincta.

155. **Laboulbenia pedicellata** Thaxt. — Syll. XIV p. 733 — *L. * bogo-* 4138
sensis Speg., Laboulb. Mus. ital. in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 496, fig. 37. — Oligomastiga. Habitu graciliore, cellula praebasali magis inflata nec non perithecio ab androsticho omnino libero a typo recedere videtur. — Alt. 200-250 μ , perith. 90-100 \approx 50, paraph. 60-120 μ alt.

Hab. in *Anchomeno fuscicorni*, Ansala, Bogos, Africa (O. ANTINORI).

- ** L. ventricosa* Speg., Laboulb. Arg. p. 608, fig. 142 b. — Eulaboul- 4139
benia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga, parva, tota fumosa, cellulis I et II anguste pedicelliformibus, androsticho gynostichoque dense minuteque punctulatis, perithecio valide ventricosus.

Hab. in elytris *Bembidii mendocini*, Alto Pencoso, San Luis Arg. — Perith. 75-80 \approx 40-45; alt. tot. 150-175 μ .

156. **Laboulbenia pterostichi** Thaxt. — Syll. XIV p. 734. — ** L. Charrua* 4140
Speg., Lab. Arg. p. 634, fig. 165 b. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, tota hyalina, linea media perithecii ejusdem cum androstichi adhaerentia atque paraphysis simplicis parte superiore saepe leniter fumosis.

Hab. in elytris *Feroniomorphae moerentis*, Montevideo. — Perith. 80-110 \approx 25-40; alt. 200-300.

157. **Laboulbenia cryptici** Speg., Laboulb. Arg. p. 620, fig. 152 — *Eulaboul-* 4141
benia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, parvula, fere tota olivacea; cellula basali subhyalina praebasalem subaequante, tertia ceteris saepius obscuriore, quinta et septima segmentiformibus minimis, psallio subcrassiusculo latinusculoque, paraphysopodio ejusdemque axeos primari cellulis inferis intense coloratis atque dorso nigricantibus, paraphyse solitaria v.

geminata, perithecio elongato-ellipsoideo, umbonato-ostiolato, hypostomo nigro, ostiolo obliquo labiis parum evolutis.

Hab. in elytris *Cryptici platensis*, Chaco Argent. — Perith. 70-80 \approx 30-32; alt. tot. 175-200 μ .

158. *Laboulbenia jujuyensis* Speg., Lab. Arg. p. 630, fig. 161. — Eu- 4142
laboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastica, tota obscure olivacea, cellula basali pallida, praebasali medio subcoarctata minute transversim rugulosa, ceteris receptaculi obsolete fusco-maculatis, perithecio elliptico-sublanceolato sursum attenuato vix umbonato, ostiolo subobliquo labiis pallidioribus parum hiantibus donato, lineis longitudinalibus dextrorsis 4 nigris notato, paraphyse unica simplice crassiuscula oligomera fusca, ramulis antheridialibus gracilibus breviusculisque.

Hab. in elytris *Egae argentiniae*, Jujuy, Argent. — Perith. 120-135 \approx 45-50; alt. tot. 300-325 μ .

159. *Laboulbenia formosa* Speg., Lab. Arg. p. 626, fig. 156, *L. poly-* 4143
phaga Speg., Contr. Lab. Arg. n. 56 fig. 62 e, non Thaxt. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, tota pallide olivacea, paraphysopodio oblique elliptico, articulos 2 superpositos isomorphos sensim minores gerente, omnibus tribus dorso paraphysem obliquam simplicem obscure-olivaceam fulcentibus.

Hab. in elytris *Harpali* sp., Formosa in Chaco boreali. — Perith. 100-110 \approx 40-42; alt. tot. 245-275.

160. *Laboulbenia siramboensis* Speg., Laboulb. Mus. ital., in Anal. Mus. 4144
Nac. Buenos Aires XXVI (1915) p. 498 fig. 40. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, parvula, 150-175 μ alta, fusco-mellea, ad septa omnia valide constricta; habitu subtoruloso; cellula praebasali brevi, subglobosa; perithecio androsticho ad dimidium fere adnato, anguste ellipsoideo, 75 \approx 25-30, grosse umbonato oblique ostiolato; paraphysibus paucis, elongatis, 75-100 μ , fumosis.

Hab. in *Anchomenidis* sp., Sirambo, Sumatra. — Habitu toruloso satis distincta, ceterum *L. flagellatae* Peyr. affinis.

161. *Laboulbenia Anisodactyli* Speg., Laboulb. ital. I, in Redia X p. 46 4145
(1914) tab. IV fig. 31. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 350-400 μ alta, subfumoso-olivascens; paraphysodio et andropodio atratis coalescentibusque; paraphysibus paucis, fumosis, 50-100 μ longis; perithecio late elliptico, 110-130 \approx 60-65, obscure fuscescente, grosse umbonato,

ostiolo obliquo labiis concoloribus; cellula androstichi quarta infuscata, quinta subhyalina nitida, decima autem gynostichi opaca, subnigra et tumida.

Hab. in *Anisodactylo binotato*, Lovajano prope Pisam, Ital. bor.-centr.

162. *Laboulbenia Axinotomae* Speg., Laboulb. Mus. ital., in Anal. Mus. 4146

Nac. Buenos Aires XXVI (1915) p. 490 fig. 33. — Eulaboulbenia, haploeytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mellea, parva, 250 μ alta; cellula praebasali majuscula, leniter incrassata; perithecio subcylindraceo 90 \times 30, parum magis infuscato, apice grosse umbonato, hypostomo nigro, ostiolo obliquo labiis gracilibus hyalinis; paraphysibus paucis, elongatis, 300-350 μ , non incrassatis.

Hab. in *Axinotoma fallace*, Bolama, Guinea lusitanica (L. FEA). — *L. flagellatae* Peyr. proxima sed satis, ut videtur, distincta.

163. *Laboulbenia etrusca* Speg., Laboulb. ital. I, in Redia X p. 50 4147

(1914) tab. V fig. 36. — Eulaboulbenia, haploeytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, 275-300 μ alta, cellulis basali et praebasali subhyalinis, ceteris atris opacis; perithecio subelliptico 110-125 \times 50, nigro opacoque, apice sensim obtuse umbonato, ostiolo non vel vix distincto; paraphysibus saepius binis fumosis, interna crassiore validioreque, 16-20 μ diam., externa 10-12 μ . — Certe affinis *L. vulgaris* Peyr. sed bene distincta.

Hab. in *Bembidio conforme*, prope Pistoia, Ital. bor. centr.

164. *Laboulbenia maroccana* Speg., Laboulb. Mus. ital. in Anal. Mus. 4148

Nac. Buenos Aires XXVI (1915) p. 494, fig. 36. — Eulaboulbenia, haploeytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 250-275 μ alta, tota pallide mellea; cellulis secunda, tertia et quarta transverse minute rugulosis; perithecio brevi, crasso, 90-100 \times 40-45, superne vix angustato, crassissime obtusissimeque umbonato, non vel vix infuscato, ostiolo parum manifesto; paraphysopodio cylindraceo paraphyseum unicam 8-10-articulatam, 250-300 \times 15-20 gerente; antheridiopodio subconoideo in paraphyseum 7-8-articulatam producto, articulo secundo biantheridiifero.

Hab. in *Brachynobombarda*, Tangeri, Marocco, Afr. bor. — *L. polyphagam* Thaxt. et *L. flagellatam* Peyr. in mentem revocans, sed distincta.

165. *Laboulbenia Bottegoid* Speg., Laboulb. Mus. ital., in Anal. Mus. 4149

Nac. Buenos Aires XXVI (1915) p. 491 fig. 34. — *Eulaboulbenia*, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, minima, 75-100 μ tantum alta; obscure mellea, translucens; cellula basali breviter cylindracea, praebasali subturbinata; paraphysopodio amplo, hyalino; axi paraphysario primario simplici, 2-3-grosse nigro-annulato, perithecio subcylindraceo, 35 \times 10, apice grosse umbonato, lateraliter ostiolato; paraphysibus paucis, 75 μ longis.

Hab. in *Casnonia punctulata*, Boran, Somalia (G. BOTTEGO).

166. *Laboulbenia Ophoni* Thaxt. — Syll. XVI p. 687. — * *L. augusta* 4150 Speg., Laboulb. ital. I. in Redia X p. 57 (1914) tab. VII fig. 49. Oligomastiga. A typo differt tumiditate minore et omnibus partibus gracilioribus pallidioribusque. — Alt. 160-175 μ , perith. 65 \times 30, paraph. 100-125 μ longis.

Hab. in *Harpalo aeneo* et in *Ophono* sp., in Ital. bor (Ven.) et centr.

- * *L. fuscula* Speg., l. cit. tab. VII fig. 50. — A typo colore fusco-melleo 4151 omnium partium paraphysibusque plus minusve fumosis vel nigrescentibus recedit. — Alt. 125-175 μ , perith. 60-75 \times 25-40, paraph. 100-125 μ .

Hab. in *Harpalo flavicorni*, Firenze, Ital. centr.

- * *L. insulicola* Speg., l. cit., tab. VII fig. 51. — A typo recedit statura 4152 majore et totius corporis elongatione ac gracilitate psallioque nigro crassiore nec non saepe axi paraphysali primario fumoso vel nigrifacto. — Alt. 200-250 μ , perith. 90-100 \times 35-40, paraph. 150-250 μ alt.

Hab. in *Harpalo pubescente*, ex ins. Elba, et in *Ophono rupicola* prope Romam, Ital. centr.

- * *L. minuscula* Speg., l. cit., p. 58, tab. VII, fig. 52. — A typo recedit 4153 statura conspicue minore et omnium partium gracilitate. — Alt. 90-100 μ , perith. 45-50 \times 18-20, paraph. 125-150 μ longis.

Hab. in *Harpalo sulfuripede*, prope Romam, It. centr.

- * *L. sepulchretorum* Speg., l. c., p. 59, tab. VII fig. 53. — Statura et tur- 4154 gescentia nonnihil minoribus, constrictionibus ad septa validioribus sat a typo distincta. — Alt. 125-150 μ , perith. 60 \times 22, paraph. major 75-100 μ alta.

Hab. in *Harpalo rubripede*, in cemeterio, Coneglianum, It. bor.

- var. *dilatata* Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 4155

1920, Extr. p. 24, fig. 5. — A typo differt statura elongata, receptaculo infra appendices et perithecium dilatato, perithecio leniter atro-fusco suffuso, cellula quinta minore brevior, ascosporis majoribus (46-48 \times 5).

Hab. in *Oryzomys pubescens* L., Mouzaïaville, Algeria, Africa bor.

167. *Laboulbenia guineensis* Speg., Laboulb. Mus. ital., in Anal. Mus. 4156 Nac. Buenos Aires XXVI (1915) p. 493 fig. 35. — Eulaboulbenia, haploecytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 350-400 μ alta, rufescenti-fusca; cellula praebasali elongata, subcylindrica, ventre convexa, ad septum primum et secundum constricta; perithecio majusculo, cylindraceo, 125-140 \times 35-50, grosse umbonato, vix bilobo-ostiolato; paraphysibus paucis, 150-250 μ altis; paraphysopodio et cellula basali axeos paraphysarii primarii margine externo, saltem in juventute, infuscatis.

Hab. in *Megalonycho acanthuro*, Bolama, Guinea lusitanica (L. FEA). — *L. Rougeti* Rob. et *L. Catascopi* Thaxt. notis variis proxima sed satis distincta.

168. *Laboulbenia Olistopi* Speg., Laboulb. ital. I, in Redia X p. 55 4157 (1914) tab. VII fig. 47 et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 495. — Eulaboulbenia, haploecytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, parvula, 175 μ alta, rufescenti-atra, pellucida; perithecio opaco, 75 \times 40, ostiolo laterali obtuso, labio ventrali tantum hyalino; paraphysibus rigidulis, parum elongatis, simplicibus, subhyalinis, primaria 125 μ alta.

Hab. in *Olistopis rotundato* in Toscana, Ital. bor.-centr., et *O. Sturmii* in Saxonia. — Affinis *L. flagellatae* et *L. polyphagae* a quibus facile distinguitur colore rufescente ut in *L. Rougeti* Rob.

169. *Laboulbenia coneglanensis* Speg., Laboulb. ital. I, in Redia X 4158 p. 47 (1914) tab. IV fig. 32. — Eulaboulbenia, haploecytia, melanopsallia, apodotheca, malacochaeta, oligomastica, mediocris, 250-400 μ alta, fuscidula, elongata; cellula basali brevi, obconoidea, 40-50 \times 20-25; praebasali duplo triplove longiore, cylindracea, 80-150 \times 22-32; septo primo plus minusve infuscato, leniter sed semper constrictulo; perithecio subcylindraceo 100-125 \times 30-50, obscuriore, dorsum breviter androsticho connato, sursum conoideo vel subrotundato, in ostiolo valido, hypostomo atro, oblique truncato, labiis hyalinis donato producto: paraphysibus paucis subhyalinis, longiusculis, 175-250 μ longis.

Hab. in *Ophono pubescente* in Italia boreali. — Affinis
L. flagellatae Peyr. et *L. melanariae* Thaxt

- * *L. grisea* Speg., l. cit. p. 48, tab. V fig. 33. — A typo recedit cellula 4159
præbasali conspicue brevior et crassior, septo primo validius
constricto et nigrificato, peritheciis subpallidioribus, paraphysibus
binis vel ternis tantum. — Alt. 200-225; cellula basalis 35×20 ,
præbasalis 40×20 , perith. 100-30-35, paraph. 220-225 μ .

Hab. in *Ophono hospite*, Roma, et *O. griseo*, prope
Coneglanum, in Italia bor.

- * *L. psittacea* Speg., l. cit. p. 48, tab. V fig. 34. — A typo recedit sta- 4160
tura minore et gracilitate omnium partium, cellula basali parum quam
præbasali brevior sed æquicrassa, hyalina, septo valide coar-
tato, perithecio nigro opaco, ostioli labiis etiam nigris, cellula
quarta androstichi atrata sæpius opaca, paraphysum subhyalina-
rum axi primario supra articulum secundum divaricate uniramoso. —
Alt. 200-275 μ , cellula basalis 50×20 , præbasalis 75×20 , perith.
100-110 \times 25-30, paraph. 225-250 μ alt.

Hab. in *Harpalo psittaceo*, prope Coneglanum, Italia
boreali.

170. *Laboulbenia Paumamae* Speg., Laboulb. Mus. ital., in Anal. Mus. 4161
Nac. Buenos Aires XXVI (1915) p. 506 fig. 46. — Oligomastiga.
Parvula, 80-125 μ alta, fuscula; receptaculo turbinato, cellula ba-
sali majuscula obconica, præbasali trapezoide, e latere dorsali cel-
lula gynostichi infera vacuoliformi, supera pusilla triangulari or-
nata; androsticho subnormali, psallio atro minuto parum manifesto
coronato; axi paraphysario primario infuscato patentim acuto, su-
perne in paraphysopodio subcylindræo majusculo dorso axi pa-
raphysali secundario longiusculo simplice vel bifido producto; an-
theridiopodio parvulo monomero; perithecio subfusioideo, leniter
inaequilâtero, 50-60 \times 20, distincte umbonato, ostiolo minuto. late-
rali, obliquo; paraphysibus 200-250 μ longis.

Hab. in *Paumama sulcicolli*, Paumamua River, Nova
Guinea (E. MODIGLIANI).

171. *Laboulbenia Scaphidomorphi* Speg., Laboulb. Mus. ital., in Anal. 4162
Mus. Nac. Buenos Aires XXVI (1915) p. 497, fig. 39. — Eulaboul-
benia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligo-
mastiga, mediocris, 200-250 μ alta, pallide castaneo-mellea, leniter
sed distincte dorso arcuata; cellula præbasali crassa; perithecio
obscuriore, ad tertium inferum androsticho adnato, cylindræo,
superne curvulo, 60-75 \times 35, in umbone suboblique truncato cras-

sissimo producto; paraphysibus saepius geminis, elongatis, pallidis, deciduis, 150-200 μ altis.

Hab. in *Scaphidomorpho Bosci*, Chiriqui Panama, Amer. Centr. (E. RIBBE). — Species prope apicem gibboso-curvata, a caeteris omnibus facile dignoscenda.

172. *Laboulbenia elegantissima* Speg., Argent. in Anal. Mus. Nac. Bue- 4163
nos Aires XXIII (1912) p. 205 fig. 33. — Subparva, 200-250 μ alta, tota obscure fulginea, melanopsallia, polymastiga; peritheciis ellipticis, rectis, 100 \times 45-50, ad tertium inferum usque parte distali connatis, ostiolo breviter umbonato, regulari, exappendiculato; paraphysibus atris, fragillimis, subgracilibus.

Hab. in *Feroniomorpha cordicollae*, prope La Plata, Argentina. — *L. variabilis* Thaxt. et *L. fumosae* Thaxt. proxima.

173. *Laboulbenia Dailodonti* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4164
Buenos Aires XXIII (1912) p. 203 fig. 32. — Majuscula, 600-800 μ alta, tota pallide olivacea, melanopsallia, polymastiga; peritheciis basi brevissime parte distali adnatis, cylindraceis, 250-270 \times 90, ostiolo obtuso, vix obliquo, exappendiculato; paraphysibus paucis, bifidis, crassis, subhyalinis.

Hab. in *Dailodonto clandestino*, Tucuman, Amer. austr.

174. *Laboulbenia Antarcticae* Speg., Laboulb. Argent. in Anal. Mus. 4165
Nac. Buenos Aires XXIII p. 196 (1912) fig. 24. — Tota fuscidula, mediocris, 200-300 μ alta, melanopsallia, polymastiga; peritheciis ovoideis, 100-120 \times 50-60, parte distali ad tertium inferum usque connatis, lineis 4 longitrorsis subspiralibus reticulatis, ostiolo brevissimo, lato, obtuso, obliquo, nigrescente, exappendiculato; paraphysibus subnigricantibus, nodoso-serratis.

Hab. in *Antarctica blanda*, Cordoba, Argentina. — Quoad perithecia *L. decipiens* Thaxt., quoad paraphyses *L. Pheropsophi* Thaxt. in mentem revocat.

175. *Laboulbenia Chlaenii* Speg., Laboulb. Argent. in Anal. Mus. Nac. 4166
Buenos Aires XXIII (1912) p. 201 fig. 29 et in Anal. cit. XXVI (1915) p. 459. — Majuscula, 400-500 μ alta, mellea, hyalopsallia, polymastiga; receptaculo obconico inferne elongato, gracili atque incurvato; perithecio ellipsoideo, 175-180 \times 70-75, ad tertium vel quartum inferum tantum parte distali adnato, ostiolo brevi nigrescenti obtuso obscureque subbilabiato; paraphysibus numerosis gracillimis simplicibus elongatis.

Hab. in *Chlaenio platensi*, purpurato, cuma-

tili, La Plata, Isla Santiago, Argentina, Montevideo, California. —
L. variabilis Thaxt. et *L. proliferanti* Thaxt. affinis.

176. *Laboulbenia proliferans* Thaxt. — Syll. XVII p. 923 — * *L. subdi-* 4167
varicata Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Ai-
 res, XXVI (1915) p. 462 fig. 7. — Psalliophora. A typo recedit
 cellulis proliferantibus tribus in paraphysibus tribus praelongis,
 300-400 μ usque attingentibus, simplicibus, basi septis nigris plane
 destitutis productis. — Alt. 500-600 μ ; perith. 175 \times 50.

Hab. in *Chlaenio pectinipede*, Karin-geçü, Birmania
 . (L. FEA).

- * *L. subinterposita* Speg., Laboulb. ital. I, in Redia X p. 33 (1914) 4168
 fig. 9.

Hab. in *Harpalo sulfuripede*, in Italia. — Long. tot.
 175-375 μ .

177. *Laboulbenia Lagari* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 4169
 Buenos Aires XXVI (1915) p. 479 fig. 23. — Pseudodithea. Ha-
 ploctytia, parva, 270-300 μ alta; cellula basali cylindrica, praeba-
 sali abrupte turbinata; gynosticho brevi parum manifesto; andro-
 sticho elongato, perithecio adnato, psallio normali atrato; paraphy-
 sopodio maximo, cylindraceo, fumoso, apice articulo axeos primarii
 paraphysarii lageniformi, 50 \times 40, coronato; antheridiopodio minuto
 penicillum antheridiorum pusillum fulcente; perithecio adhuc im-
 maturo.

Hab. in *Lagaro inepto*, Bone, Algeria. — Species rursus
 inquirenda.

178. *Laboulbenia Feae* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 4170-
 Buenos Aires XXVI p. 465 fig. 10. — Haploctytia, apodoteca, schi-
 zosoma, subparva, 200-300 μ alta, gracilis, fuscula; cellulis basali
 et praebasali cylindraceis, elongatis, subhyalinis; androsticho majus-
 culo, etiam cylindraceo, apice breviter libero atque psallio atro
 valide constricto coronato; paraphysibus hyalinis, elongatis, 250-
 300 μ longis, paucis; gynosticho abbreviato, cellula septima fere
 abortiva; perithecio elliptico-subcylindraceo, 85 \times 30, subnigrescente,
 crasse umbonato, hypostomo nigro, ostiolo oblique truncato, labiis
 hyalinis donato.

Hab. copiosa in *Deropeltide* sp., in ins. St. Tomè, Afr. lu-
 sitanica (L. FEA).

179. *Laboulbenia Elaphri* Speg., Laboulb. Mus. ital., in Anal. Mus. 4171
 Nac. Buenos Aires XXVI (1915) p. 64 fig. 9. — Haploctytia, schi-
 zosoma, melanopsallia, pallida, 250 μ alta; cellulis basali et prae-

basali subturbinatis majusculis; androsticho apice breviter libero, valide rotundato-constricto, psallio nigro coronato; gynosticho normali; perithecio infuscato, elliptico-subcylindrico, 125×40 , breviter crasseque umbonato; paraphysibus paucis, divaricatis, fusciscentibus, 150μ longis, axi primario ramum secundarium validiorem, torulosum ac nigrefactum fulcente

Hab. in *Elaphro cupreo*, ex Belgio. — Affinis *L. clivinali* Thaxt. sed facile distinguenda.

180. **Laboulbenia Brachyonychi** Thaxt. — Syll. XVI p. 683. — * *L. Euschi-* 4172
zomeri Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 463 fig. 8. — Schizosoma. A typo differt statura conspicue minori ($200-250 \mu$), perithecio ($100-125 \times 25$) brevius pedicellato, ostiolo rotundato-subtruncato, cellula quinta minus perspicua, paraphysibus pluribus brevioribus, $50-100 \mu$ altis.

Hab. in *Euschizomero aeneo*, Tikekae, Pegù, Birmania, Indiae or. (L. FEA).

181. **Laboulbenia Rhytisterni** Speg., Laboulb. Mus. ital., in Anal. Mus. 4173
Nac. Buenos Aires, XXVI (1915) p. 466 fig. 11. — Haplocytia, schizosoma, melanopsallia, malacochaeta, oligomastiga, medioeris, $300-500 \mu$ alta, mellea; cellula praebasali elongata, satis inflata; androsticho sursum breviter libero, psallio crassiusculo nigro coronato, paraphysibus paucis, divaricato-ramulosis, $150-200 \mu$ longis aucto; perithecio elliptico, $120-150 \times 50-60$, apice grosse umbonato, umbone nigro oblique truncato, ostiolo parum perspicuo.

Hab. in *Rhytisterni* sp. indet., Rock-Hampton, Australia. — *L. pallescenti* Thaxt. et *L. clivinali* Thaxt. cognata.

182. **Laboulbenia Sphodri** Speg., Laboulb. ital. I, in Redia X p. 36 4174
(1914) tab. II fig. 15. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, schizosoma, majuscula, $400-500 \mu$ alta, infuscata; paraphysopodio nec non andropodio percrassis coalescentibusque, cellula basali axeos primarii nigrescente, ceteris vix fumosis valde proliferis; perithecio $150-200 \times 75-80$, nigro, parte dorsali supera excepta, androsticho plus minusve concolore, cellula tamen quinta pallida, ad medium usque connato, ostiolo grosse umbonato, obliquo, saepius nigrificato, labiis vix decoloribus; paraphysibus $100-300 \mu$ longis.

Hab. in *Sphodro Schreibertii*, in alpinis Forum Julii, It. bor.

183. **Laboulbenia Morionis** Thaxt. — Syll. XIV p. 733. — * *L. morionicola* 4175
Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI

(1915) p. 480 fig. 24. — *Synandrocarpa*. Parvula, 200-250 μ alta, fusca; perithecio ad medium usque tantum saepius androsticho adnato, 65 \times 25, umbone crasso, obtuso, nigro, ostiolo sublaterali minuto, labiis subhyalinis donato; paraphysibus paucis, fragilibus, mox deciduis.

Hab. in Morione humerato, Fly-river, Nova Guinea (E. DE ALBERTIS).

184. *Laboulbenia Euplinis* Speg., Laboulb. Mus. ital., in Anal. Mus. 4176

Nac. Buenos Aires XXVI (1915) p. 483 fig. 26. — *Haplocytia*, melanopsallia, apodotheca, malacochaeta, oligomastiga, strombotheca, parva, 200-250 μ alta, e melleo brunneo-picea, pellucida; cellula basali brevi, turbinata, dimidio supero infuscata, praebasali subcylindracea, ad septum sextum valide constricta; perithecio ellipsoideo, 100 \times 45, androsticho basi breviter adnato, lineis utrimque duobus obliquis magis fuscis clathrato, apice longe umbonato, umbone superne exinie rotundato; psallio atro, crasso, brevi; paraphysibus elongatis, crassiusculis, 250-300 μ longis, pallidis, grosse articulatis.

Hab. in *Eupline cyanipenni*, Selebes (O. BECCARI).

185. *Laboulbenia trachypus* Speg., Laboulb. Mus. ital., in Anal. Mus. 4177

Nac. Buenos Aires XXVI (1915) p. 486 fig. 29. — *Eulaboulbenia*, haplocytia, melanopsallia, malacochaeta, oligomastiga, apodotheca, theletheca, parvula, 175 μ alta, pallide mellea, pellucida; cellula basali subconica levi, praebasali subcylindrica leniter infuscata, annulis papillarum densarum minutarumque transversis duodecim ornata, ceteris normalibus; androsticho perithecio ad dimidium et ultra adnato; perithecio ellipsoideo-elongato, 60 \times 20, hypostomo nigro torquato, ventri foveolato-depresso, ostiolo obliquo, labiis hyalinis; paraphysibus paucis, fragilibus, hyalinis, deciduis.

Hab. in *Dromiif* sp., Rio Cassine, Guinea lusitanica (L. FEA).

186. *Laboulbenia Ragazzii* Speg., Laboulb. Mus. ital., in Anal. Mus. 4178

Nac. Buenos Aires XXVI (1915) p. 485 fig. 28. — *Eulaboulbenia*, haplocytia, melanopsallia, malacochaeta, apodotheca, oligomastiga, theletheca, parvula, 200-250 μ alta, pallida; cellula basali obconica, praebasali cylindracea; perithecio ad tertium inferum androsticho adnato, subcylindrico, 90-100 \times 35, apice umbonato-ostiolato, ad basim hypostomi et ad medium cingulo turgido transverso infuscato ornato, ostiolo atrato subbilabiato; paraphysibus paucis, bacillaribus, simplicibus, brevibus.

Hab. in *Harpali* sp. indet., Let-marefà, Scioa (RAGAZZI).

187. *Laboulbenia Leonardi* Speg., Laboulb. Mus. ital., in Anal. Mus. 4179

Nac. Buenos Aires XXVI (1915) p. 484 fig. 27. — Eulaboulbenia, haplocytia, melanopsallia, malacochaeta, apodotheca, theletheca, parva, 225 μ alta, subpallida, brunnea; cellulis basalibus, androsticho gynostichoque annulis fuscis papilliferis transversis ornatis; perithecio subcylindraceo, 75 \times 30, levi, grosse fusceque biannulato, apice breviter umbonato; paraphysibus 3-5, elongatis, subhyalinis, simplicibus, 150-200 μ longis.

Hab. in *Megalonycho acanthuro*, Bolama, Guinea lusitanica (L. FEA).

188. *Laboulbenia Diabroticae* Thaxt., Laboulb. on Chrysom. 1914, p. 38. 4180

Hab. in elytris *Diabroticae Fairmairei* et spp., Jalapa Mexico, Trinidad, Guatemala (KELLEERMAN). — Perith. 100-140 \times 20-28; sporidia 50 \times 5; appendix longior 120-140; recept. longius usque ad cellulam insertionis 175-265 \times 35; long. tot. ad apicem perithecii 300-390 μ (Uncinella).

- * *L. Boggiani* Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos 4181

Aires XXVI (1915) p. 505 fig. 45. — (Uncinella). Parvula, 150-200 μ alta, fuscula, receptaculo pallido subcylindraceo; androsticho unicellulari obconico; perithecio conoideo subfusoides, atrato, 90 \times 30; paraphysibus numerosis, simplicibus, nigris, rigidis, apice acutis abrupteque uncinato-incurvis, 60-70 μ longis.

Hab. in *Diabrotica Kirschi*, Puerto 14 de Mayo, Chaco (G. BOGGIANI) — A typo recedit apicibus paraphysarum semper recurvis acutisque, genus proprium novum, *Phachomycei* affine, constituere digna (Uncinella).

189. *Laboulbenia variabilis* Thaxt., Monogr. Lab. I, p. 351. — * *L. cliv-* 4182

nicola Speg., Rev. Lab. Arg 1917 p. 560, *L. pallescens* Speg. Contr. Lab. Arg. n. 50 p. 56 (non Thaxt.). — Zigolaboulbenia, pleocytia, apsallia, tota fusco-olivacea, psallio cellulis pluribus verticalibus collateralibus submajusculis substituto, paraphysopodio andropodioque bothryose proliferantibus, paraphysibus chlorinis densis filiformibus elongatis, perithecio inflatulo androsticho ad medium usque et ultra adnato, vix umbonato, hypostomo non v. vix infusato, ostiolo leniter obliquo, labiis pallidioribus rotundatis, antice conspiciue minore.

Hab. in toto corpore *Ardistomis Arechavaleta*, in ins. Santiago, La Plata — Perith. alt. tot. 110-14 \times 60-75; alt. tot. 400-500 μ .

- * *L. eumetabola* Speg., l. c. p. 561 fig. 29 c. — *Zigolaboulbenia*, pleocytia, apsallia, *L. variabili* Thaxt. affinis sed septo 8. semper obliquo, cellulis III et VI brevibus inaequalibus et praecipue cellulis I et II hyalinis nec non colore atro fere nigro opacoque, perithecii gynostichi ac saepe totius androstichi distinctissima. 4183

Hab. in elytris *Carabidi* spec. (*Platyni*?), Montevideo. — Perith. 150-175 × 60-75; alt. tot. 400-500.

- * *L. pachythelica* Speg., Rev. Lab. Arg. 1917, p. 562. — *L. proliferans* Speg., Contr. Lab. Arg. p. 57 fig. 63 (non Thaxt.). — *Zigolaboulbenia*, pleocytia, apsallia, obscure rufo-fusca dense obsoleteque subpapillosa, receptaculo superne opaco, perithecio erecto saepius lineis 4 longitudinalibus rectis notato, apice abrupte crasse breviterque nigro-umbonato, ostioli cellulis proliferantibus numerosis subopacis, paraphysibus copiosis fabrica longitudine nec non colore maxime ludentibus. 4184

Hab. in elytris *Hypolithi* puberuli, Bonpland Misiones, Arg. — Perith. 150-175 × 60-75; alt. tot. 400-500 μ.

190. *Laboulbenia gibbulosa* Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915), p. 55, fig. 20. — *Zygodolaboulbenia*. Magnitudine sat ludens, 200-400 μ alta, saepius valde infusca; stipe elongato, fuscoideo, 100-300 × 20-25, ad septum primum incrassato, fumoso; androsticho gynostichoque adnatis, atris, opacis; psallio nigro parum perspicuo; paraphysopodio ac antheridiophoro pallidis, crassis, subglobosis; paraphysibus brevibus, copiosis, penicillatim congestis; peritheciiis conoideo-ellipsoideis, 80-90 × 30-40, atris, subopacis, ad medium marginis ventralis valide gibbosis, ostiolo rotundato, labiis parum inaequalibus, subhyalinis. 4185

Hab. in *Agono fruficornae*, prope Coneglanum, Ven., It. bor., et verisimiliter etiam in Argentina.

191. *Laboulbenia mirabilis* Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII p. 56 (1915) fig. 22. — *Laboulbeniopsis*. Mediocris, 400 μ alta, plus minusve infusca, cellulis prima et secunda pallidis genu septi primarii saepius tumidulo, cellula septima lineari aegerrime perspicua, sexta minuta trigona; perithecio androsticho normali ultra medium adnato, 125 × 35-40, apice bilabiato, labio ventrali concavo, dorsali capitato ostiolifero; paraphysopodio, psallio majusculo insidente, cylindraceo, cellulis binis superpositis fuscis coronato; antheridiopodio hyalino, majusculo, paraphysibus geminis, achrois, subhorizontaliter evolutis, crassis, multiarticulatis, 200 × 10 ornato. 4186

Hab. in *Bembidio nitidulo*, prope Coneglanum Ven., Ital. bor. — Videtur forma anomala *L. paradoxae* Speg., quae quoque cum *L. truncata* Thaxt. et *L. perpendiculari* Thaxt. ad subg. *Laboulbeniopsis* (cellulis gynostichi sexta et septima plus minusve abortivis vel deficientibus) spectat.

192. *Laboulbenia paradoxa* Speg., Laboulb. ital. II, in Anal. Mus. 4187

Nac. Buenos Aires XXVII (1915) p. 58, fig. 23. — *Laboulbeniopsis*. Haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, parvula, 175 μ alta, tota fusca; receptaculo conoideo, androsticho majusculo, regularibus; psallio nigro latissimo, gynosticho valde abbreviato perithecioque ultra medium androsticho adnatis; cellulis secunda, tertia, quarta et sexta saepius longitrorsum rugulosis septima carente; perithecio conoideo-elongato, 90 \times 35, umbone subcapitato praedito, ostiolo subdorsali crasseque bilabiato; paraphysopodio maximo, conico, 75-90 μ alto, in flagello 2-3-articulato, gracili producto; antheridopodio subhyalino, paraphyse maxima, percrassa, 110-125 \times 15-20, clavata, 5-mera, concolore ornato.

Hab. in *Bembidio nitidulo*, prope Coneglanum, Ven., Ital. bor. — Affinis *L. truncatae* Thaxt.

193. *Laboulbenia Acupalpi* Speg., Laboulb. Mus. ital., in Anal. Mus. 4188

Nac. Buenos Aires, XXVI (1915) p. 458 fig. 4. — *Zygolaboulbenia*. Haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, tota pallida, 150 μ alta; perithecio subcylindraceo, 70-80 \times 30-35, medio lateris ventralis plus minusve gibboso, gibba et ostiolo saepius infuscatis; cellula basali cylindracea, gracili, brevi, hyalina, praebasali brevi, crassa, subhyalina et obsolete minuteque maculata; ostiolo obliquo ventrali; paraphysibus 50-75 \times 5.

Hab. in *Acupalpo elegante*, Neusiedler See, Hungaria.

— * *L. cryptotheca* Speg., Lab. Arg. p. 618, fig. 148 b. — *Eulaboulbenia*, 4189

melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; mediocris subhyalina, perithecio saepius leniter fumoso, latere ventrali ad hypostomi basin nec non ad medium eximie gibbuloso-angulato, receptaculo elongato normali, paraphysibus 1-3, andropodio minuto pauci-antheridiato.

Hab. frequens in elytris *Ochtozeli bicoloris*, Sta Catalina B. A., La Plata. — Perith. 65-75 \times 25-28; alt. tot. 175-200 μ .

194. *Laboulbenia patrata* Speg., Laboulb. ital. II, in Anal. Mus. Nac. 4190

Buenos Aires XXVII (1915) p. 59 fig. 24. — *Laboulbeniopsis*. Haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, parva, 175-200 μ alta, castaneo-fusca; receptaculo pallido, obconico-

elongato; androsticho normali, septo tertio et quarto intus conniventibus; gynosticho cellula septima deficiente; paraphysopodio maximo hemisphaerico, axi paraphysario primario 2-3-cellulari, septis nigris opacis, cellula suprema maxima, clavata, intus incurva; antheridiopodio cuneiformi, parvo, antheridio solitario sessili donato; perithecio normali, ovoideo-oblongo, $85 \times 35-48$.

Hab. in *Elaeodis* minutis, prope Coneglanum, Ven., It. bor.

PEYERIMHOFFIELLA Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 18 (a cl. entomologo gallico P. de Peyerimhoff). — Receptaculo bicellulari; appendicis liberae filiformis cellula subbasilari vel rarius basilari ramulum antheridiferum simplicem vel breviter ramosum gerente.

1. *Peyerimhoffiella elegans* Maire, l. c., tab. I fig. 5-9. — Minor (80-115 μ 4191 alta) crasse tunicata, dilutissime brunneola. Receptaculo bicellulari 20-25 μ longo, cellulae basalis pede atrato. Appendice subhyalino, longissimo (usque ad 200 μ), multiseptato, in cellula subbasali v. rarius in basali ramulum antheridiale simplicem v. breviter ramosum gerente; antheridiis acrogenis simplicibus. Perithecii maturi dilute brunnei, pedicello brevi (30-38 longo), crasso, bicellulari; perithecio (45-58 \times 18-22) asymmetrico, subfusiformi, apice in collum attenuato; ostiolo cellulis 4 apice in papillas brevissimas desinentibus cineto. Ascosporis hyalinis, laevibus fusiformibus, utrimque acutis, inaequaliter 1-septatis; cellula superiore inferiore triplo longiore.

Hab. in membris et in abdomine *Brachyglutae Reichei* pr. Dely-Ibrahim Algeriae (DE BORDE) et *B. dichroae* in monte Mouzaïa Atlantis Algerici (DE PEYERIMHOFF), Africae bor.

PSELAPHIDOMYCES Spég., Lab. Arg. p. 662 (1917). — Laboulbenius; receptaculum bicellulare; cellula supra dorso in androsticho simplici polymero, articulis superis e latere interne ad angulum superum antheridia conoidea parva gerentibus, ventre in pedicello polymero apice perithecigero producta; cellula ascogenica solitaria; sporis acicularibus geminatis excentrice 1-septatis achrois. — Gen. *Stichomyces* Thaxt. affinis, pedicello peritheciali polymero distinctus.

1. *Pselaphidomyces Pselapti* Spég., l. c. p. 662, fig. 190. — Pusillus, 4192 totus fere hyalinus, margine dorsali androstichi simplicis saepe anguste nigrescente excepto; perithecio lanceolato subacutiusculo, pedicello 5-10-mero fulto.

Hab. in partibus dorsalibus *Pselapti tuberculiferi*, in nidis *Attæ Lundi*, La Plata, Argentina. — Perith. 50-55 \times 15-17; sporidia 15-18 \times 2.

RHACHOMYCES Thaxt. 1894. — Syll. XI p. 454, XIV p. 735, XVI p. 690, XVII p. 917, XXII p. 15 (= *Acanthomyces* Thaxter 1892, nom. præocc.).

1. *Rhachomyces argentinus* Thaxt., Proc. Amer. Acad. 1912, p. 208; 4193 Speg., Lab. Arg., fig. 191.

Hab. in elytris et artubus *Agæ argentinæ*, Jujuy Argent. boreal. — Perith. 120 \times 40-43; appendix longior 95 μ ; long. totalis ad apicem peritheci 310-425.

2. *Rhachomyces stipitatus* Thaxt. — Sacc., Syll. XVI p. 691. — var. 4194 *pallidus* Maire, Bull. Soc. Hist. nat. Afrique du Nord, IV m. 9., p. 3 tab. II fig. 3-5 (1912). — A typo differt præcipue perithecio hyalino et appendicibus obscuris parvis.

Hab. præcipue ad pedes *Aphaenopsidis Iblis*, in spelunca Ifri-Maareb in Djurdjura, Algeria, Africa bor. (P. DE PEYERIMHOFF).

3. *Rhachomyces Aphaenopsis* Thaxt. — Sacc., Syll. XXII p. 15. — var. 4195 *Jeanneli* Cépède et Picard, Bull. Soc. Mycol. Fr. 1913, p. 555. — *Rhach. Jeanneli* Cépède et Picard, Bull. Scient. France Belgique t. 42., 1909, p. 253, ut species. — A *Rh. Aphaenopsis* Thaxt. differt cellulis receptaculi parum minoribus appendicibus contra multo longioribus, fere e basi omnino nigris, semper congestis, appendicibus specialibus brevibus apice hyalinis perithéciorum verisimiliter nullis; receptaculo 180-200 μ longo; appendicibus 1080-1120 μ long. nec 350 μ .

Hab. in *Aphaenopside Jeanneli*, in spelunca Oxibar prope Camoucihique (Tardetz-Sorkolus) in Pyrenæis inf., et *Aph. bucephala*, in spelunca Lingué prope Moulis, St. Girons Ariège, Gallia (Coll. JEANNEL).

4. *Rhachomyces orientalis* Thaxt., Proc. Amer. Acad. 1915, p. 49. 4196

Hab. in trochanteribus insecti *Tachyi* affinis, Samarang Java. — Perith. 100-116 \times 25; recept. 60-80 \times 22; appendices longiores 110 μ , long. tot. ad apicem peritheci 160-200 μ .

5. *Rhachomyces Peyerimhoffii* Maire, Bull. Soc. Hist. nat. Afrique du Nord, IV, n. 9, p. 3 tab. II fig. 1-2 (1912). — Perithecio maturo rufo-brunneo, subfusiformi, 120-200 \times 50-70, sessili v. subsessili; ascosporis 60-70 \times 5, hyalinis vel dilutissime brunneolis, laevibus,

apice vagina mucosa dilatata cucullatis, ad $\frac{1}{3}$ infer. uniseptatis. Receptaculo 225-400 μ longo, rufo-brunneo; axis primarii vix ultra peritheci basim protracti v. proliferi, simplices v. ramosi, cellulis 14-18 stigmatiferis; axis secundarii cellulis conoideis 2-4 septatis, appendices antheridioque immixto gerentibus; appendicibus fusco-atris, subopacis, multiseptatis uniformibus usque 400 μ long.; antheridiis unciformibus, pediculo unicellulari suffultis.

Hab. in *Trechopsida Lapiei*, in « tessereft » Djebel-Haïzer, Africa bor.

6. **Rhachomyces Fagniezi** Picard, Bull. Scient. France Belgique t. 50., 4198 1916-1917, p. 457. — Perithecio hyalino v. vix pallide flavescenti, receptaculo subaequante v. plerumque longiore (185-195 μ), anguste fusioideo v. lanceolato apice acutato, pedicello brevi suffulto; receptaculo hyalino distincte incurvato, 130-170 μ longo; axe primario e parte basali insertionem peritheci attingentem, et parte distali libera efformato; altero e cellulis circ. 10, magnis, magis longis quam latis septo contractulis constituto, altero a 8-10 cell. parvis aequalibus quadratis, omnibus longe appendiculatis (app. 210-230 μ usque long.); axe secundario e cellulis minoribus efformato breviter appendiculatis (app. 100-150 μ long.); appendicibus omnibus brunneis, primariis apice incurvatis, secundariis rectis; antheridiis in axe secundario ortis, brunneis, fortiter elongatis collo elongato abrupte incurvato terminatis, 45 μ long.; sporis 35 μ long. Totus fungus 320-330 μ longo.

Hab. in *Zuphio Schelkownikowi*, ex Caucaso (CH. FAGNIEZ).

SCAPHIDIOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 209 — Axis e receptaculo primario bicellulari constans; cellula subbasilaris gerens apice appendicem primariam ramosam et inferius receptaculum secundarium ex inde finita serie cellularum, perithecia pedicellata ramulosque alterne gerenti formatum. Antheridia simplicia in ramulis brevibus acrogena. Perithecia normalia.

1. **Scaphidiomyces Baeocerae** Thaxt., Proc. Amer. Acad. 1912, p. 209. 4199 Speg., Lab. Arg., fig. 9.

Hab. in elytra speciei indscriptae *Baeocerae*, ad *Corticia* et ligna uda, Llavallol et Sta Catalina Argentina.

CLEMATOMYCES Thaxt. — Syll. XXI p. 692.

1. **Clematomyces argentinensis** Speg., Lab. Arg. p. 480, fig. 23. — Maju- 4200

sculus, hemisphaericus, plus minusve melleus, receptaculo basi alterne sympodico, sterili infusato superne subtrichotomico, ramis non parenchymaticis, mediano gracili antheridifero, lateralibus crassioribus peritheciferis omnibus lateraliter filamentis longis tenuibusque sympodice ramosis coronatis; peritheciis obclavato-conoideis, obscure melleis, in ostiolo medioeri obtusiusculo elongato attenuatis.

Hab. in artib. ant. *Pinophili suffusi*, Santa Catalina B. A., Argent. — Alt. tot. 350-400 μ ; perith. 135-140 \times 35-40 (cum pede).

COMPSOMYCES Thaxt. — Syll. XI p. 450.

1. *Compsomyces platensis* Speg., Lab. Arg. p. 483, fig. 25. — Medio- 4201
cris, hyalinus, perithecio excepto fumoso. Receptaculum dimerum breve, cellula subbasali e latere receptaculum secundarium fulcente, superne cellulam tertiam sustinente; cellula tertia receptaculis tertiariis binis sterilibus nec non, inter illa, pedicello perithecigero praedita; receptacula secundaria et tertiaria 1-mera pleurogene ascogonii rudimento donata atque superne appendice 4 mera apice paraphysibus saepius geminis ramulosis coronata; perithecium elongato-conoideum vertice obtuse obsolete subcapitulato, deorsum pedicello elongato cylindraceo imposito.

Hab. in elytris minuto *Staphylin.* cujusdam (*Escafidiano*), in ins. Santiago Argent. — Alt. tot. 230-275 μ ; perith. 90-100 \times 35-40 (sine ped.).

COCHLYIOMYCES Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII p. 180 (1912) c. ic. — Dioicus? Receptaculum monostiche multicellulare, cellulis a basi ad apicem sensim latioribus; cellula apicalis in appendice sterili filiformi producta; cellula praeapicalis axim secundarium sustinens, cujus cellula basali e latere interno perithecigera. Perithecium cylindraceum torulosum. Antheridia adhuc ignota. — Genus *Ecteinomyces* Thaxt. accedens sed certe satis superque distinctum.

1. *Cochlyiomyces argentinensis* Speg., l. cit., c. ic. — Characteres gene- 4202
ris, 300-400 μ alt. receptaculo oblique 12-15-cellulari, superne 25-30 μ lato, perithecio 160 \times 35, toto plus minusve intense melleo; sporidiis anguste lanceolatis, curvulis, hyalinis, superne acutioribus ad tertium inferum septatis, 40 \times 5.

Hab. in *Trecho laevigato*, La Plata, Argentina.

AUTOPHAGOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 172. — Individua mascula cellulae basilari et pedi individui feminei adhaerentia, ex pluribus cellulis superpositis formata et gerentia acropleurogena 1-plura antheridia majuscula, phialiformia — Individua feminea constans ex unica cellula basilari quae peritheci cellulam pedunc. gerit; cellula ascogena unica; sporidia 1-septata.

1. *Autophagomyces platensis* Thaxt., Proc. Amer. Acad. 1912, p. 172. 4203

Hab. in elytris *Tomoderi forticornis*, Llavallol Argent. — Individuo masc. antheridia 1-3, 25 μ longa. Long. tot. ad apicem antheridii 58-63 \times 5. — Indiv. feminea: perith. 106 \times 28-32, cellula pedunc. 14-18 \times 10-14; cellula basilari 9 \times 10,5, dempto pede.

2. *Autophagomyces nigripes* Thaxt., Proc. Amer. Acad. 1912, p. 173. — 4204

Indiv. masc.: antheridia 1-2, 26 μ longa; longit. tot. ad apicem antheridii 60-70 \times 3,5. Indiv. feminea: perith. 106 \times 26; cellula pedunc. 26-28 \times 16; cellula basilaris sine pede 26 \times 9.

Hab. in superf. inter. abdominis *Tomoderi forticornis*, Argentina.

CRYPTANDROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 173. — Receptaculum ex binis cellulis suprapositis constans; cellula sup. perithecium singulum et appendicem gerens; appendix e cellularum serie unica non ramosa formata; sterili plures cellulae consecutivae, initio tamquam antheridiales cellulae funguntur; ex harum parietibus pertusis cellulae spermaticae effunduntur; perithecia normalia unicâ cellulâ ascogena praedita.

1. *Cryptandromyces Peyerimhoffii* R. Maire, Bull. Soc. Hist. Nat. A- 4205

frique du Nord, t. 11., 1920, Extr. p. 18, tab. I fig. 11-12. — Receptaculo bicellulari, subhyalino v. inferne melleo; cellula basali elongata, ungue subgloboso nigro hyalino-punctato, basi hyalino-apiculato, praedita; cellula subbasali multo minore, subtriangulari septo valde obliquo lateraliter dejecta, appendicem masculam et peritheci pedicellum gerenti. Appendice mascula antheridiis, ut videtur, carenti, in axi, cellulae basali evoluta, tricellulari; cellula inferiore subhyalina, subtriangulari; cellula media subquadrangulari, brunnea, septo superiore nigricanti; cellula terminali brunnea cylindro-conica, apice, apiculo acuto praedita. Peritheci pedicello, subhyalino, breviusculo, supra basim valde constricto; cellulis basilibus parvis, subtriangularibus; perithecio incurvo, asymmetrico, melleo, parum inflato, satis elongato, in rostrum validum, brevem,

in facie interna et externa fuscescentem, vix attenuato; ostioli rotundati labiis hyalinis prominulis; cellula ascogenica unica; ascis 4-sporis; ascosporae 1-septatae, cellula superiore inferiore subduplo majore. — Totus fungus 125-135 μ alt.

Hab. in *Arthrolipe obscuro* var. *Sanctae-Bal-mae* Ab., in Mauretania, Africa bor.

2. *Cryptandromyces geniculatus* Thaxt., Proc. Amer. Acad. 1912, p. 174. 4206
Speg., Lab. Arg., fig. 45.

Hab. in elytris etc. *Oonophri* nov. sp., Temperley et La Plata Argent. — Sporidia majuscula $28 \times 3,5$; perith. 50-70 \times 25-30; cellula pedunc. 20-26 \times 8; receptacul. 26-35 \times 12-16; appendix 50 \times 9, longior 130 μ .

3. *Cryptandromyces javanus* Thaxt., Proc. Amer. Acad. 1915, p. 36. 4207

Hab. in insecto ex *Scydmaenidis* stirpe, Java (ROUYER). — Perith. 60-70 \times 23-25, pes 20-40 μ ; appendix incl. pede 30-38; series antheridialis 28 μ ; receptac. 35-40; long. tot. ad apicem perithecii 100-120 μ .

4. *Cryptandromyces subgaleatus* Thaxt., Proc. Amer. Acad. 1915, p. 37. 4208

Hab. in elytra insecti *Scydmaeno* affinis, Samarang, Java. — Perith. 86 \times 20; incluso pede 25 \times 8; appendix 215 \times 8; ramulus antheridialis 30 μ ; receptac. 20 \times 10; long. tot. ad apicem perithecii 125 μ .

CUCUJOMYCES Speg., Lab. Arg., 1917, p. 506. — *Laboulbeniineus* peyrtschiellaceus, *Monoicomyceteis* affinis; monoicus, receptaculum flabellatum, cellula basali obovata pluribus subbasalibus monostiche cineta efformatum: cellulae basales, altera intermedia interposita, androstichum et gynostichum geminato, extimae androstichum v. ramulum sterile fulcentes; androstichum e cellulis monostiche superpositis, superis et supremis paraphysatis, constitutum; antheridia solitaria cellula apicali androstichi inclusa, poro parvo inter paraphyses aperta; gynostichum e cellula pedicellari una basi nigro-ungulata; apice abrupte perithecium proferente, constans; perithecium plus minusve infuscatum cylindricum v. ovatum, saepius, transverse grosse denseque sulcatum, cellula basilari segmentoidea parum perspicua, nucleo ascogonico solitario, sporis linearibus excentrice 1-septatis hyalinis mucoso vaginatis in ascis subfusoides geminatis.

1. *Cucujomyces cylindrocarpus* Speg., Lab. Arg. p. 507, fig. 46. — Cel- 4209
lulae subbasales 7-9; androsticha subfusoides-cylindracea 8-12 mera

apice parce breviterque paraphysata torulosa, septis crassis nigris; pedicelli peritheciales cylindranei ima basi breviter nigri ceterum hyalini utrinque modice attenuati, perithecia subanguste cylindracea basi nigra ceterum dense transverseque nigro-sulcata, apice conoidea ostiolo obtuso coronata.

Hab. in thorace *Brontis chilensis*, pr. lacum Nahuel-Huapi Neuquen, ex Museo Platensi.—Alt. tot. 300-350 μ ; perith. 150 \approx 15 (sine ped.).

2. *Cucujomyces elegans* Speg., Lab. Arg. p. 508, fig. 47. — Cellulae 4210 subbasales paucae, saepius 3; androsticha subfusioidea sursum longe attenuata 5-6-mera subhyalina parcissime paraphysata; perithecia ovato-pyriformia fumosa transverse dense nigro-sulcata superne ostiolo conico obtusiusculo coronata, postice abrupte truncata atque pedicello hyalino recto cylindraneo basi non v. vix incrassato nigro-ungulato suffulta.

Hab. in elytris *Brontis chilensis*, pr. lacum Nahuel-Huapi, Neuquen, ex Mus. Platensi Argent. — Alt. tot. 350-400; perith. 60-75 \approx 40-45 (sine ped.), pedic. 175-200 \approx 15-18

3. *Cucujomyces melanopus* Speg., Lab. Argent. 510, fig. 48. — Cellulae 4211 basales paucae, saepius 3 parum perspicuae, androstichis subobclavato-fusoidis 8-10-meris hyalinis superne parce-tenuiterque comatis, pedicellis perithecialibus subcylindraneis sursum vix ampliatitis deorsum elliptico-bulbosis, nigris opacis, bulbo excepto una basi tamen nigro-ungulato, perithecio elliptico-subovato pallido sulcis crassis nigris transversis notato ostiolo conico obtuso laevi coronato.

Hab. in margine abdominis *Brontis chilensis*, pr. lacum Nahuel-Huapi, Neuquen ex Mus. Platensi Argent. — Alt. tot. 300-325; perith. 75-85 \approx 18-22; ped. 150-175 \approx 10-30.

4. *Cucujomyces bilobatus* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 4212 p. 227. — Cellula basilari uniformiter obscure brunnea, distali concava et simulate biloba, cellula basilari perithecii hyalina subventricosa, parietibus fortiter incrassatis praedita. Perithecium: pedicello 50 \approx 15, coeterum cellula basali inclusa 54 \approx 22; sporis 25 \approx 2,8; appendicibus maximis 50 μ . Latitudo cellulae basilaris 18-22 μ , axis receptaculi secundarii ex apice 60 μ long.

Hab. in elytra? *Cryptophagi* sp., Auckland, Nova Zeelandia.

5. *Cucujomyces Diplocoeli* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 4213 p. 276. — Cellula basali obscure brunnea translucida; pedicello pe-

ritheci opaco; antheridio terminali simplici. Perithecium: appendix 100-200 \times 7, basi bulboso usque 18 μ cr., cellulae regione basilari 14 \times 18; perithecium proprium 50-56 \times 20-28; sporis 30 \times 3; appendicibus 35-70 \times 5.

Hab. in elytra *Diplocoeli* sp., Corral, Chile, America austr. — *C. elegantissimo* et *C. melanopo* proximus.

6. *Cucujomyces stipatus* Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 4214 p. 224. — Cellula basali magis longa quam lata obscure brunnescenti; receptaculo ut in *Teratomyces*. Perithecio area opaca inclusa 100-130 \times 18; sporis circ. 35 \times 3; appendicibus longioribus e apice ramulorum 50-70 \times 5; totus fungus 140-175 μ long.; receptaculo circ. 50 \times 28 pede incluso.

Hab. in elytra *Hyliotae Chilensis*, Corral Chile, America austr. — Proximus *C. cylindrocarpi*.

7. *Cucujomyces intermedius* Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, 4215 p. 223. — Cellula basali leniter suffusa, pedicello purpurascenti, saepe obscuro v. in parte superiori omnino opaco. Perithecio 38-45 \times 16-18; pedicello 175-300 \times 12; ramulis longioribus 100-125 μ long.; cellulis latioribus ramulorum usque 8,5 \times 7.

Hab. in *Hyliota Chilensis*, Corral Chile, Amer. austr. — *C. eleganti* Speg. proximum.

8. *Cucujomyces curtipes* Thaxt., Proc. Amer. Ac. of Sc. 54., 1918, 4216 p. 228. — Cellula basilari brunneo tineta, magis lata quam longa; pedicello peritheci abbreviato; perithecio subinflato uniformiter obscure brunneo. Pedicellum peritheci 18 \times 10; corpus, inclusa regione cellulae basilaris, 60-66 \times 22-28; sporis 35 \times 3,5. Totus fungus e apice peritheci 95-105 μ long.; ramis primariis 50 μ long.; longitudo receptaculi secundarii e apice ramulis terminalibus 90 μ .

Hab. in elytra *Liodes* sp., Corral Chile, America austr. — *C. Diplocoeli* proximus.

SCELOPHOROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 210. — Receptaculum primarium ex cellula basilari et subbasilari formatum, cellula subbasilaris ramulos laterales pluricellulares gerens et perithecio primario terminata, cellulae, subbasilari cellulae superpositae ramulos copiosos introrsum apiceque gerentes; perithecia secundaria e pede communi inferius orientia. Antheridia (?) simplicia et in ramulis inferioribus acrogena.

1. *Scelophoromyces osorianus* Thaxt., l. c. p. 211.

1217

Hab. in abdomine et elytra *Osorii sexpunctati*, Pa-

lermo et Ins. Santiago La Plata, nec non in Osorii majuscula specie in Amazonia (MANN). — Perithecia 95-110 × 30-40; peritheciij rami 25-120, cum cellulis basilaribus 130-250 μ long., regio basilaris 20-40 × 25-30; long. totalis ad apicem appendicis longioris 400 μ , sustentaculum 100-275 μ .

LABOULBENIOMYCETÆ incertæ sedis

v. omnino dubiæ et ad PHYCOMYCETES etiam vergentes

CHANTRANSIOPSIS R. Thaxt., Bot. Gaz. LXIII (1914) p. 246. — (Etym. *Chantransia* ob habitum hujus algæ). Entomophila. Filamenta firma, elastica, persistentia, crasse tunicata, hyalina, septata, varie caespitulosæ, basi atra opaca (entomogenea) prædita, varie ramosa. Conidia solitarie acrogena, ovato-oblonga, basi truncata, continua, hyalina. — Nonnullæ species habitus etiam Dematiaceo donatæ.

1. **Chantransiopsis decumbens** Thaxt., l. c. p. 248, t. XVIII p. 19-21. — 4218
Divergens, decumbens, laxa, parce ramosa, hyalina; hyphis sursum tenuatis, 230-350 × 6, subspiralibus; conidiis oblongo-ellipsoideis v. subpiriformibus, 30-35 × 9-11.

Hab. in parte inf. insecti ex Staphylinideis, Malang, Java (ROYER). — Habitu procumbente imprimis dignoscenda species.

2. **Chantransiopsis stipata** Thaxt., l. c. p. 248, t. XVIII fig. 17-18. — 4219
Hyphis dense confertis, erectis v. vix inflexis, rigidis, dense septatis, vulgo basi 1-ramosis e basi nigra entomogena oriundis, 110 × 5; conidiis tereti-oblongatis, apice rotundatis, basi truncatis, 25-32 × 8.

Hab. in parte inf. insecti Staphylinoides affinis Tachino, Java (ROYER). — Hyphis subrectis stipatis et conidiis angustis distincta species.

3. **Chantransiopsis Xantholini** Thaxt., l. c. p. 249, t. XVIII fig. 14-16. — 4220
Hyphis densiuscule caespitosis, copiose ramosis, rectis v. leniter flexis, 70-175 × 5-7, e basi nigra opaca entomogena oriundis; conidiis minusculis ovoideis v. oblongis, apice rotundatis, 10-18 × 5-6.

Hab. infer. superf. thoracis Xantholini obsidiami, Fresh Pond, Cambridge Mass., Amer. bor. (THAXTER).

4. **Chantransiopsis (Asteronycha) platensis** Spegazzini, Obs. microbiol. 4221 in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 11, cum icon. — Cornulus subdiscoideus, polymerus, semilenticularis (8-12 μ diam.), cellula centrali majore atra opaca, marginalibus saepius 8 radiantibus minoribus (5 μ cr.) pallidioribusque cineta; hyphis ex cellulis

marginalibus, totis v. pro parte, enascentibus, 100-200 \times 5-6, saepius unilateralibus, simplicibus v. parcissime subparalleleque ramosis, caudae cometæ ejusdam subsimilibus, 10-20-meris, ad septa non v. vix constrictis, articulo supremo ex penultimo protrudente (Empusarum more) ac mox deciduo.

Hab. ad corporem Belonuchi hemorrhoidalis et A-caridorum, in cortice putrescenti Mauihot carthagenensis, Santa Catalina Rep. Argentina, America austr.

5. **Chantransiopsis (Tetrameronycha) bonaerensis** Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina, t. 85., 1918, Extr. p. 9, cum icon — Cornulus fuliginus subopacus 3-septatus e fronte ellipticus 30-35 μ latus, e latere dimidiato lenticularis, 18-20 μ latus, superne sub apice lateraliter dehiscens ac hypharum fasciculum emittens; hyphis (10-30) filiformibus hyalinis 150-200 \times 5-6 e basi confluentibus antice subpenicillatim expansis, saepius simplicibus 5-12 septatis, ad septa suprema tantum v. vix constrictis, articulus earum apicalis ex subapicali protrudens et caducus 16-20 \times 6-8 (conidia v. sporae?).

Hab. ad corporem Staphylinorum (Eleusis nigerrimus, Xantholinus subtilis, Lispinus tenellus), Dipteri Dilocapodidei ejusdam, in ramis Phytolaccae dioicae vigenti, Santa Catalina et La Plata, Rep. Argentina, America austr.

AMPHOROMORPHA Thaxt., Bot. Gaz. LVIII (1914) p. 249. — (Etym. *amphora* et *morphe* forma). — Entomophila, e cellulis duabus involuero communi firmo obtectis constans, involuero apice perforato; sporae globoso-angulosae, in cellula superiori evolutae et per foramen involucri exeuntes. Stirps dubia, basi denigrata insectis inserta. Genus ambiguum, caracteres Ohytridiacearum et Laboulbeniacearum ostendens.

1. **Amphoromorpha entomophila** Thaxt., l. c. p. 251, t. XIX f. 26-28. — 4223 Pallide flavo-brunnea, translucens, amphoriformis, in rostellum breve obtusum apicale producta, tota 110-130 μ longa, corpore 70-105 \times 28-31, rostello 14-17 \times 7,5-8, pedicello 35 \times 17; sporis conglomeratis, 4 μ circ. diam.

Hab. in setulis Diochi conicollis, Manilla Ins. Philipp., ubi aliae formae magis imperfectae occurrunt in Staphilini-dis; cfr. l. c. t. XIX f. 29-31.

2. **Amphoromorpha blattina** Thaxter, Bot. Gazette 69., 1920, p. 20, 4224

tab. IV fig. 44. — Flavesceus, sessilis pede lato obscuro praedita; forma elongato-ovoidea, apicem versus parum latiori, apice rotundato; sporis 50-100, circ. 5 μ diam.; sporogonio 55-70 \times 18-20, pede 18-22 \times 18, e fronte viso.

Hab. ad antennis *Blattiae* cujusdam ignotae, Grand Etang Grenada. — *Amph. mediae* proxima.

AMPHOROPSIS Spegazzini, Obs. microbiol. in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 4. — Perithecium plus minusve ellipsoideum sursum rotundatum v. vix obsolete umbonatum, deorsum cuneatum sessile v. pedicellatum ungue valido nigro substrato adfixo, intus omnino sporis repletum, basi sterili plane nulla; sporaе ameboidae e mutua pressione angulosae saepius octonae. — Ab *Amphoromorpha* Thaxt., differt peritheciis apice obtusis et basi intus sterili.

1. *Amphoropsis minuta* Spegazzini, l. c., fig. 1. — Peritheciis subellipsoideis apice obsolete umbonatis, deorsum breviter sed manifeste cuneato-pedicellatis (pedicellum cum ungue 10 \times 5), laevibus, hyalinis, 45 \times 10; sporis enucleatis. 4225

Hab. ad tarsos et ungues parvi *Histeri* sp., in truncis putrescentibus Palmarum, La Plata Rep. Argentina, America austr.

2. *Amphoropsis subminuta* Spegazzini, l. c. Extr. p. 5, fig. 2. — Peritheciis ellipsoideo-clavulatis (sine ungue 45-50 \times 13), apice modice sed patenter umbonatis, deorsum cuneatis sed omnino sessilibus, levibus, hyalinis; sporis plerumque distincte uninucleatis. 4226

Hab. ad pilos abdominis et ad ungues posteriores *Echiasteris depressi* et *melanuri*, La Plata Rep. Argentina, America austr.

3. *Amphoropsis media* Spegazzini, l. c. Extr. p. 5, fig. 3. — Peritheciis ex ellipsoideo-clavulatis, apice omnino exumbonatis, basi abrupte coarctatis et in pedicellum brevem sed eximie distinctum productis, levibus, hyalinis, 75 \times 18-20; sporis majusculis, parce angulosis enucleatis. 4227

Hab. ad pilos *Clivinae longipennis*, in ins. Santiago prope La Plata, America austr.

MYRIAPODOPHILA Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 5. — Perithecium lineare sursum sensim attenuatum, basi abrupte coarctatum atque in pedicellum tenuem ungue crasso suffultum productum, basi sterili nulla, sporis ameboidaeis angulosis.

1. *Myriapodophila argentinensis* Spegazzini, l. c., Extr. p. 6, fig. 4. — 4228
Tota hyalina; peritheciis subsigmoideis (75-125 × 12-16, absque ped. et ung.), levibus tenuiter tunicatis, pedicello geniculato-subhorizontali brevi tenui fultis; sporis majusculis angulosis, enucleatis.
Hab. ad pilos et ungues parvae *Scolopendrea* sp. in ins. Santjago prope La Plata, Rep. Argentina, America austr.

THAXTERIOLA Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina t. 35., 1918, Extr. p. 6. — Corpus fusoides-sublineare, sursum in rostrum elongatum rectum v. curvulum productum postice modice attenuatum, sessile v. breviter pedicellatum, ungue nigro bene evoluto suffultum; intus septis 2 transversis trimerum, articulum supremum sporis amoeboides paucis monostichis repletum.

1. *Thaxteriola infusata* Spegazzini, l. c., Extr. p. 7, fig. 5. — Parva, 4229
40-45 × 4-5, fusco-plumbea, per aetatem saepius atra, rostro parum arcuato et pedicello brevissimo semper tamen subhyalinis, septis internis sat approximatis; sporis parvis, irregulariter cuboideis, hyalinis.

Hab. frequens ad antennis *Labiae minoris* et *Philonthi convexicollis*, prope La Plata, nec non ad pilos *Belonuchi haemorrhoidalis*, Santa Catalina, Rep. Argentina, America austr.

2. *Thaxteriola subhyalina* Spegazzini, l. c. Extr. p. 7, fig. 6. — Tota 4230
et semper hyalina v. subhyalina, pusilla (20 × 3), rostro valde arcuato, septis internis sat remotis.

Hab. ad marginem antennarum *Aphodii granarii* et *lividi*, prope La Plata, Rep. Argentina America austr.

3. *Thaxteriola nigromarginata* R. Thaxter, Bot. Gazette 69., 1920, p. 15, 4231
tab. IV fig. 37-38. — Subsigmoidea, basin et apicem versus hyalinis exceptis, pallide brunnescenti, versus medium macula nigra praedita, cellula basilari longitudine dimidium totius fungi aequante; totus fungus 62-68 μ long., 8-8,5 μ latus in parte latiori cellulae basilaris.

Hab. ad pila *Staphylinidarum*, Samarang Java.

ENDOSPORELLA R. Thaxter, Bot. Gazette, 69., 1920, p. 16 (Etym *endos* intus et *spora*). — Axis e quatuor cellulis superpositis efformatum, basilari infra pedicelliformi angustata, terminali mucrone elongato praedita, intus sporidia e basi efformantia uniseriata, apice exeuntia.

1. *Endosporella Diopsidis* Thaxter, l. c. tab. IV fig. 39-41. — Pede parvo, 4232
nigro acuminato; cellula basali infra angustata et hyalina oblique
brunneo-nigrescenti; cellula secunda et tertia brevioribus subae-
qualibus v. superiori parum majori, terminali seu sporogonio lon-
giori dimidium longitudinis totius fungi quandoque subaequante
nigro maculato, apice mucrone deciduo et ostiolo hyalino aperta;
totus fungus 100-150 \times 10-12, sporogonium 50-60 \times 10-12.

Hab. ad crura *Diopsidis* sp., Kamerun Africa occ. — Gen.
Thaxteriolae affine.

LABOULBENIOPSIS R. Thaxter, Bot. Gazette, 69., 1920, p. 17 — Axis
simplex, pede distincto, collo bicellulari et sporogonio definito ter-
minato; sporidia hyalina minuta, apice exeuntia. — Genus hoc
Thaxteriolae et *Endosporellae* verisimiliter affinis, et cum Gen. *En-*
tomocosma Speg. gregem *Thaxteriolarum* efformans.

1. *Laboulbeniopsis termitarius* Thaxter, l. c. p. 17, tab. IV fig. 42-43. — 4233
Pede et sporogonio pallide brunnescens, collo subhyalino; pede
lato extus fortiter convexo, uno latere nigro maculato, infra plus
minus acuminato; sporogonio collo subaequante v. longiore, recto,
subsymmetrico, infra leniter inflato, ibique duobus cellulis parum
distinctis praedito, apicem versus sensim attenuato circa porum
constrictulo; totus fungus 100-130 μ long., sporogonio 45-50 \times 12,
collo 45-50 \times 8-10, pede 25 \times 12, sporidiis 3,5-4 \times 2,5.

Hab. ad apicem cruris *Eutermidis morionis* var. *St. Luciae*, Grand Etang Grenada.

ENTOMOCOSMA Spegazzini, Obs. microbiol., in An. Soc. Cient. Ar-
gentina, t. 85., 1918, Extr. p. 7. — Receptaculum dimerum appen-
dicem oligomeram perithecium v. antheridia fulcentem coronatum,
ungue nigro matrice adfixo; antheridia? subcymbiformia rostratula
superposita; perithecium? acrogenum parvum pyri-v. lageniforme,
sporis paucis amoeboides irregulariter subglobosis repletum.

1. *Entomocosma laboulbenioides* Spegazzini, l. c. Extr. p. 8, fig. 7. — 4234
Parvula, tota 75-125 \times 10-14, hyalina v. vix straminea, perithecium
cellulis binis superpositis fultum, antheridia 3-6 superposita cel-
lula unica insidentia.

Hab. praecipue ad pilos, totius corporis *Cercyonis* varie-
gati, prope La Plata, Rep. Argentina, America austr.

COREOMYCETOPSIS R. Thaxter, Bot. Gazette, 69., 1920, p. 13 (Etym.

a *Coreomyces* cui simile). — Axis e cellulis superpositis efformatum; cellula basilari majori inflata pedicelliformi; cell. terminalibus dum ob septa evanida sporoforum efformantibus; sporidia numerosa apice emissa.

1. *Coreomycetopsis oedipus* Thaxter, l. c., tab. IV fig. 32-36. — Hyali- 4235
nus v. flavescens; pedicello inflato infra acuminato concolori; cellulis 10-15 superpositis ultimis e sexta v. septima proliferis; sporoforo subfusoides v. obelavato; totus fungus 100-135 μ long., sporogonium 45-60 \times 12-15, pedicello 25 \times 12-15, sporidia elongato-ovoidea 8-9 \times 2-2,5.

Hab. ad crura *Eutermis morionis* var. *St. Luciae*, Grand Etang Granada.

PYRENOMYCETÆ FR. EM.

Syll. I p. 1, IX p. 364, XI p. 252, XIV p. 462, XVI p. 398, XVII p. 524, XXII p. 19.

Fam. 1. Perisporiaceæ

Caracteres et dispositionem secundum SPEGAZZINI (in « Physis », t. IV, 1918. p. 281: Perisporiales), comparationis causa tantum ostendimus.

I. ERYSHIPHEÆ Lév. — Biophilae subiculo mucedineo, perithecia astoma, parenchymatica, singula, semper v. juventute pallida.

Hyalosporae: *Erysiphe* Lév., *Microsphaera* Lév., *Phyllactinia* Lév., *Podosphaera* Lév., *Sphaerotheca* Lév., *Uncinula* Lév.

II. EUROTIEÆ (Sacc.) — Saprophilae, subiculo mucedineo, perithecia astoma, parenchymatica, singula, pallida.

Hyalosporae: *Cryptothecium* P. S., † *Cystotheca* B. et C., *Allescheria* Sacc. et Syd. *Eurotium* Lnk.

Phaeosporae: *Penicillioopsis* Solm., *Laaseomyces* Ruhl.

Hyalodidymae: *Chilemyces* Speg.

III. PERISPORIEÆ (Sacc.) — Saprophilae, subiculo dematiaceo, perithecia astoma, parenchymatica, singula, nigricantia.

Hyalosporae: *Anixia* Fr., *Anixioopsis* Hng., *Apiosporium* Knz., *Micromastia* Speg., *Polysporidium* Syd.

Phaeosporae: *Arachnomyces* Mass. et Sal., *Ascotricha* Rbh., *Cephalotheca* Fuck., *Chaetomidium* Zpf., *Chaetotheca* Zkl., *Magnusia* Sacc., *Orbicula* Cke., *Pleuroascus* Mss. et Slm., *Thielavia* Zpf.

Hyalodidymae: *Pampolysporium* Mgn.

Phaeodidymae: *Argynna* Mrg., *Marchaliella* Wnt., *Testudina* Bizz., *Wentomyces* Koord., *Zopfia* Rbh. (= *Richonia* Boud.).

Phaeophragmiae: *Perisporium* Fr.

Phaeodictyae: *Ceratocarpia* Roll., *Cleistotheca* Zkl.

IV. MELIOLEÆ Speg. — Biophilae, subiculo dematiaceo, perithecia astoma parenchymatica, singula, nigricantia.

Hyalosporae: *Meliolopsis* Speg. (= Sacc.) (cum spec. *Apiosporii* biophilis), *Pilgeriella* Hung. (= *Guignardiella* Sacc. et Syd.), *Samarospora* Retr.

Hyalodidymae: *Dimeriella* Speg., *Dimerina* Thsz., *Neorehnia* v. Höhn.

Phaeodidymae: *Alina* Reb., *Balladyna* Reb., *Dimerium* Sacc. et Syd., *Kusanobotrys* Hng., *Parodiella* Speg. (= *Mairella* Syd.), *Phaeodimeriella* Speg. (= *Thsz.*), *Winteromyces* Speg.

Hyalophragmiae: *Zukalia* Sacc., *Trichomerium* Speg. n. gen.

Phaeophragmiae: *Euantennaria* Speg. n. gen., *Ceratosperma* Speg. n. gen., *Meliola* Fr., *Perisporina* Hng., *Schenckia* Hng.

Phaeodictyae: *Pleomerium* Speg. n. gen.

Scolecosporae: *Ophiomeliola* Strb.

V. LASIOBOTRYEAE. — Biosaprophilae, subiculo plus minus evoluto, dematiaceo, stromata superficialia discoidea, perithecios astomos parenchymaticos globosos gerentia efformante.

Phaeodidymae: *Lasiobotrys* Knz.

Hyalophragmiae: *Paropsis* Speg. n. gen.
: *Scyphostroma* Strb.

VI. ENGLERULAEAE P. Henn. — Biophilae, subiculo mucedineo plus minus evoluto, perithecia subglobosa, subastoma, anhistia, singula, subnigricantia.

Hyalosporae: *Hyalodermella* Speg. n. gen.

Didymosporae: *Dimeriosporiella* Speg., *Englerula* Hng., *Hyalothales* Speg., *Schiffnerula* v. Höhn.

Phragmosporae: *Hyaloderma* Speg.

Scolecosporae: *Saccardomyces* Hng., *Leptascospora* Speg. n. gen.

VII. CAPNODIEAE Sacc. — Biophilae, subiculo membranaceo, perithecia ostiolata, parenchymatica v. prosenchymatica, singula, nigricantia.

Conspectus generum Capnod., seu nova dispositio syst. secund. Cl. Spegazzini, suo loco conferenda.

Subfam. 1. Erysipheae Lév.

PODOSPHAERA Kunze. — Syll. I p. 2, IX p. 364.

1. *Podosphaera Myrtilli* J. Dufrenoy, Bull. Soc. Mycol. de Fr., XXXV, 4236 1919, p. 35. — Descriptio nulla; nomen nudum ad interim.

Hab. in pagina inferiore foliorum *Vaccinii Myrtilli* (Ericaceae), « Tourbières du Lienz », 1400 m. alt., Gallia.

UNCINULA Lév. — Syll. I p. 6, IX p. 366, XI p. 252, XIV p. 462, XVI p. 399, XVII p. 524, XXII p. 21.

1. *Uncinula geniculata* Gerard. — Syll. I p. 8 — var. *carpinicola* K. Hara, 4237 Journ. Forestry Asso. Japan, Tokyo, t. IV, 1915, n. 382, p. 62, cum icon.; Mycologia 1919, p. 80. — A typo recedit vegetatione

amphigena, peritheciis multo minoribus (70-100 μ diam.), appendicibus longioribus (150-440 \times 6-7), ascis 6-8, sporis 15-20 \times 9-11.

Hab. in foliis Carpini (Betulaceae), loco ignoto Japoniae.

2. *Uncinula neoator* (Schw.) Burr. — Syll. I p. 8 (*U. americana*) — var. 4238

Actinidiae K. Hara, Journ. Forestry Asso. Japan, Tokyo, t. IV, 1915, n. 392, p. 63, cum icon. — *U. Actinidiae* Miyabe in Salmon Mon. Eris. 1900, p. 101 (nomen nudum); Mycologia, 1919, p. 81. — A typo praecipue recedit appendicibus brevioribus et robustioribus, 100-250 μ long., 6-8 μ cr., subrigidis, basi distincte inflatis, 9-13 μ diam.; ascis typice apiculatis.

Hab. in foliis *Actinidiae polygamae* et *A. Kolomiktiae* (Dilleniaceae), loco ignoto Japoniae.

3. *Uncinula curvispora* K. Hara in litt. ad Tanaka in Mycologia 1919, 4239

p. 30, *Unc. septata* Salm., Syll. XVI p. 400 XVII p. 524 — var. *curvispora* K. Hara, Journ. Forestry Asso. Japan, Tokyo, t. IV, 1915, n. 392, p. 62. — Caespitulis obsoletis hypophyllis, tenuissime membranaceis evanidis; peritheciis punctiformibus, sparsis, depresso discoideis v. conspicue inflexis, 170-220 μ diam., nigris; contextu membranaceo, irregulariter celluloso, cellulis quandoque plus minus radiantibus, 4-8 μ cr.; fulcris numerosis, 200-300, filiformibus, simplicibus, levibus, tenuiter tunicatis 35-200 μ long., medio 4-11 septatis, infra brunneo-flavescentibus, 6-7 μ cr., apicem versus hyalinis sensim attenuatis ibique 2-2,5 μ cr. et spiraliter incurvatis; ascis 3-5, ellipsoideis v. ovoideis, apice rotundatis, infra apiculatis, tunica crassiuscula sed fragili, 65-75 \times 37-50; sporis 4-5, ellipsoideis, ovoideis v. ovoideo-reniformibus, utrumque rotundatis, flavescentibus, contextu granuloso, 28-35 \times 12-15 raro 45 \times 18.

Hab. in foliis *Fagi silvaticae* var. *Sieboldi* (Fagaceae), loco ignoto Japoniae. — Characteribus perithecorum ad novum subgen. (*Asterothecia*) adscribenda species.

4. *Uncinula Pterocarpi* Doidge, Trans. R. Soc. South Africa, v. V, P. III, 4240

1915, p. 240, tab. XXXII. — Amphigena; mycelio epiphyllis dense arachnoideo, latissimo per totam matricem effuso, cretaceo v. flavidulo, persistenti; mycelio hypophyllis tenui, effuso, albido; peritheciis numerosissimis, dense gregariis v. plus minusve sparsis, primo luteis, subglobosis, dein castaneis v. atro-brunneis, globosis depressis, 100-120 μ diam., plerumque ca. 114 μ , cellulis obscuris; appendicibus numerosis, 50-75, saepissime ca. 60, peritheciis diametrum leniter superantibus, longitudine varia in quoque perithecio, simplicibus, eseptatis, rectis v. leniter curvulis, 3-5 μ latis, sur-

sum non incrassatis, apice uncinatis v. saepe subhelicoideis, hyalinis, basi demum crasse tunicatis; ascis 8-12, ovatis, 45-50 × 20-28, basi breviter pedicellatis, curvulis, 4-sporis; sporidiis ellipsoideis hyalinis, 13-18 × 12-13.

Hab. in foliis vivis *Pterocarpi cerisei* (Leguminosae), Duivelskloof, Zoutpansberg Dist., Transvaal (E. M. Doidge) — *U. Tectonae* affinis.

5. *Uncinula aspera* Doidge, Trans. R. Soc. South Africa, v. V, P. III, 1915, p. 240, tab. XXXIII. — Epiphylla; mycelio arachnoideo, late effuso, albido, subpersistente; peritheciis sparsis, atro-brunneis, globosis depressis, 90-105 μ diam., cellulis distinctis, ca 15 μ latis; appendicibus 15-30, rectis v. leniter curvulis, simplicibus, esep-tatis, tenuē tunicatis, totis hyalinis, basi 5-6 μ latis, asperulis, sursum incrassatis usque 9 μ, apice uncinatis v. interdum helicoideis, perithecii diametrum leniter superantibus 125-165 μ longis; ascis 4-6, ovatis v. subglobosis, sessilibus, 51-57 × 45-48, 4-6-sporis; sporidiis 18-21 × 13-14.

Hab. in foliis *Fici* sp. (Moraceae), Wonderboom, Pretoria Dist., Transvaal (J. BURTT-Davy). — *U. Salicis* affinis.

6. *Uncinula Salmoni* H. et P. Sydow, Ann. Mycol. XI, 1913, p. 114. — 4242
Unc. Sengokui Salm. forma, Ann. Mycol. 1906, p. 244. — Peritheciis amphigenis, mycelio subpersistenti tenuissimo effuso insidentibus, 85-120 μ diam., cellulis parietis exterioris 10-14 μ latis; appendicibus 9-21 in quoque perithecio 100-170 μ long., rectis v. lenissime curvulis, simplicibus, hyalinis, esep-tatis, rigidis, parte basali 6-7,5 μ latis, sursum versus non v. leniter latoribus, ad apicem dense convolutis subinde fere helicoideis haud inflatis; ascis 4-6 in quoque perithecio, subglobosis v. late ovoideis, 45-50 × 23-30, pedicello brevissimo; sporis plerumque 4-6 raro 3 vel 7, ellipsoideis, utrinque rotundatis, 17-19 × 10.

Hab. in foliis *Fraxini Bungeanae* DC. var. pubescentis Wg. (Oleaceae), Kurokawa prov. Ugo, Japonia bor. (M. MIURA).

7. *Uncinula Koelreuteriae* Miyake, Bot. Magaz. Tokyo XXVII (1913) 4243
p. 39, tab. 1 fig. 1-3 et XXVIII (1914). — Mycelio epiphylllo, tenui; peritheciis sparsis, atris, hemisphaericis, 150-300 μ diam. excipulo e pseudocellulis 8-16 μ diam. constituto, appendicibus copiosis, ultra 100 ornatis, appendicibus hyalinis, lumine vix visibili, continuis, rectis vel subundulatis, apice tennatis et spiraliter breve involutis, 24-35 × 7-12; ascis in quoque perithecio circa 20, obovatis,

longe ellipsoideis vel irregularibus, brevissime crasseque pedicellatis, $64-100 \times 34-48$, apice tunica tenuiore, typice octosporis; sporidiis ellipsoideis, raro ovatis, e hyalino viridulis, intus minute granulosis et grosse $1-2$ -guttatis, $15-18 \times 10-13$.

Hab. in foliis *Koelreuteriae bipinnatae* (Sapindaceae), prope Peking, China. — Inter excipulum et ascos adest mycelium septatum paraphysioideum.

LEVEILLULA Arnaud, Ann. Service Epiphyt. t. 7., 1919-1920, p. 92, 4244
94, 108, cum icon. — Perithecia ut in *Erysiphe*, status conidicus mycelio interno donato et conidia gen. *Oidiopsis*. — Typus generis *Leveillula taurica* (Lév.) Arnaud.

TYPHULOCHAETA S. Ito et Hara in Bot. Mag. Tokyo, XXIX (1915) p. 20 (Etym. *Typhula* et *chaete*, seta). — Mycelium superficiale, haustoriis in cellulas epidermicas matricis penetrantibus. Perithecia globosa v. globoso-depressa, astoma, omnino erysiphacea. Asci plures, 8-spori; sporidia ellipsoidea continua, hyalina. Appendices perithecii indivisae, clavatae, hyalinae.

1. **Typhulochaeta japonica** S. Ito et Hara, l. c. p. 20 tab. I. — Hypo- 4245
phylla, tenuis, persistens; peritheciis sparsis v. subgregariis, globosis v. globoso-depressis, $120-200 \mu$ diam., cellulis contextus $10-20 \mu$ diam.; appendicibus numerosis ($90-160$), supra medium perithecii anulatim egredientibus, indivisis, clavatis, apice rotundatis, crasse tunicatis, hyalinis, $45-65 \times 10-15$; ascis $5-13$ ovoideis, oblongo-ovoideis, v. ellipsoideis, breviter pedicellatis, $90-97 \times 40-45$; sporidiis normaliter octonis, rarius senis, oblongo-ellipsoideis, hyalinis v. dilute flavidis, granulosis, $18-36 \times 12-18$.

Hab. in foliis *Quercus glanduliferae* (Fagaceae), pr. Mino Kawanye, Japoniae. — Conidia nondum cognita.

Subfam. 2. — Eurotieæ Sacc.

(Aspergilleae, v. Plectascineae p. p.)

EUROTIIUM Link. — Syll. I p. 95, IX p. 37, XI p. 254, XVI p. 1123, XVII p. 527, XXII p. 25.

1. **Eurotium subgriseum** Peck, N. Y. State Mus. Bull. 150 [1910] p. 30 4246
(1911). — Peritheciis minutis, $100-125 \mu$ diam., dense caespitosis, globosis vel subglobosis, flavis, sporidiis globosis, flavo-viridibus, $6-8 \mu$ diam. — Status conidicus *Aspergillus subgriseus* Peck. — Syll.

XIV p. 1046 — conidiophoris 100-125 μ altis, 7-8 μ crassis, in vesiculam subglobosam 30-40 μ diam. productis; conidiis catenulatis, subhyalinis, minutis, 3,5-4 μ diam.

Hab. ad ligna emortua et in cortice *Platan*i, Brooklyn N. Y., Amer. bor.

2. *Eurotium herbariorum* (Wigg.) Lnk. — Syll. I p. 26. — var. *mega-* 4247
lospora Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23. 1919, Extr. p. 87. — A typo differt ascis (16-18 μ diam.) sporidiisque majoribus (8 μ diam.), minutissimeque reticulatis.

Hab. ad ramulos udos dejectos in silvis prope Apiahy, America austr. (J. PUIGGARI).

3. *Eurotium Desmazieri* Cast., Suppl. Cat. pl. Mars. II p. 56 (1851). — 4248
Gregarium, minutissimum, tomento raro; peritheciis sulphureis.

Hab. in foliis emortuis *Mori* *albae* pr. Marseille, Galliae. — Teste auctore, videtur distingui ab *Eurotio herbariorum* minutie, subiculo subnullo, peritheciis interne coloratis. An ergo potius *Eurotium repens* De Bary (1871), quod vero posterius?

4. *Eurotium coriorum* Wallr. — Syll. I p. 27 — var. *gelatinicola* Speg., 4249
Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 34 (1912). — A typo praecipue recedit sporidiis conspicue majoribus. — Perithecia globosa, 100-150 μ diam., sulfurea, subiculo ex hyphis hyalinis, 2-4 μ cr., per aetatem crustula rufescente obductis, densiuscule intertextis, ramulosis efformato insidentia; asci subglobosi 14-18 \times 14-16; sporidia sphaerica 7-8 μ diam., levia vel subtilissime verrucosa, areola mucosa tenui mox evanida circumdata.

Hab. ad superficiem gelatinae glycerinatae diu loco udo servatae, La Plata, Argentina.

5. *Eurotium verruculosum* Vuillemin, Bull. Soc. Myc. de Fr. XXXIV, 4250
1918, p. 83, fig. 1-17. — Effusus, hyphis sterilibus repentibus, septatis, hyalinis; conidiophoris erectis, parce septatis, ab imo dilatatis, summo usque ad 22 μ latis; vesicula oblonga, 20-40 μ diametro; phialide-claviformi, 13-17,5 \times 6,6-7,6, basi constricta; conidiis subglobosis, peripheria verruculosis, basi levibus, summo convexis, vel disjunctore ornatis, 9,5 \times 9,5 vel 10 \times 8-9; vesiculae, phialides, conidia plus minus fuliginea. Perithecia sulphurea, 120-200 μ diametro, appendicibus destituta; ascis rotundatis, 18-20 μ , octosporis; ascosporis lenticularibus, 9-9,5 \times 7,4-7,6, hyalinis, verruculosis rotundatis ornatis, quae longe a polis evanescent et interdum marginem non sulcatam invadent.

Hab. in dauco cocto, in officina botanica nanceianae universitatis, Gallia.

ARACHNOMYCES Massee et Salm. — Syll. XVII, p. 532.

1. **Arachnomyces flavidulus** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4251

Buenos Aires, XXIII p. 35 (1912). — Sparsus, superficialis, sulfureus, matrici arcte adnatus; subiculo tenuissimo, mox evanescente, laxissimo, ex hyphis laxè irregulariter ramosis, gracilibus, 1,5-2 μ cr., hyalinis efformato; peritheciis sparsis, globosis vel globoso-depressis, 250-500 μ diam., flavis, fragilibus, densiuscule tomentosis, tenuissime membranaceis, contextu flavidulo indistincto, ostiolo plane nullo; ascis subglobosis, minutis, conglobatis, 12 μ diam., octosporis, cito diffuentibus; sporidiis e globoso ellipsoideis, tenuissime tunicatis, levibus, 4 \times 3.

Hab. ad folia sternata subputrescentia *Eucalypti globuli* (Myrtaceae), in Parque La Plata, Argentina. — Species ut videtur, *Eurotio? chilensi* Mont. affinis sed rite distincta.

CEPHALOTHECA Fuck. — Syll. I p. 36, IX p. 377, XIV p. 465, XVI p. 407, XXII p. 30.

1. **Cephalotheca abellinensis** Sacc., Notae Mycol. XXIV p. 28 (Bull. 4252

Orto bot. Napoli 1918). — Peritheciis laxè gregariis, superficialibus, globulosis, nigricantibus, minutis, 180-200 μ diam., vertice rotundatis, astomis (?); contextu parenchymatico, rufescenti praeditis, setosis; setulis rigidulis, simplicibus, rectis, acutis, continuis, basi vix incrassatis, rufo-fuligineis, sursum dilutioribus, 180 \times 18 (basi); ascis globosis, sessilibus, 18-22 μ diam., 6-8-sporis, aparaphysatis; sporidiis globulosis, conglobatis, 6 μ diam., levibus, fuligineis.

Hab. in ligno denudato, udo *Coryli Avellanae* (Betulaceae), Avellino, Ital. merid. — Habitu rigescenti a ceteris generis speciebus descisit.

DICHLAENA (Dur. et Mont.) em. Maire, Bull. Soc. Hist. Nat. Afr. du Nord 1917, p. 159. — Cfr. Syll. III p. 620. — Mycelium floccoso-radiatum, floccis raris, conidiis (ut videtur) nullis. Perithecia vitellina e tunica duplici composita, utraque membranaceo-cellulosa exterior tandem saepe prope basim circumscissa crepulam relinquens, interior vero tenuissima. Asci inordinati subglobosi, octospori; sporidia simplicia hyalina, capillitium nullum.

1. **Dichlaena Lentisci** Mont. et Dur. emend. Maire, Bull. Soc. Hist. Nat. 4253

Afr. du Nord, 1917 p. 159. — Cfr. Syll., l. c. — Hypophylla, rarius epiphylla, e flavo vitellina; perithecio exteriori subgloboso minute celluloso, basi brevissime radiatimque floccoso, tandem saepe circumscisso, interiori tenuissimo, venis laxè anastomosantibus saepe percurso; ascis subglobosis, 8-sporis, $8-10 \approx 7-8$; sporidiis subglobosis v. breviter ellipsoideis, levibus, 1-guttulatis, $3-4 \approx 3$.

Hab. in foliis delapsis *Pistaciae Lentisci* (Sapindaceae) in Mauretania, Afr. bor.

PERISTOMIUM Eckley Lechmere, Compt. rend. Acad. Sci. Paris 155 (1912) p. 178, Bull. Soc. Myc. de Fr. 1913, p. 307. [A gen. *Chaetomium* vix diversum peritheciis levibus nec setulosis].

1. *Peristomium desmosporum* Eckley Lechmere, l. c., et Bull. Soc. Mycol. Fr. 1913, p. 307-328, f. 2-12, t. XX et XXI. — Peritheciis membranaceis, sphaericis, atris, superficie mycelii enatis, laevibus pilisve simplicibus valde irregulariter dispositis ornatis, ostiolo apicali praeditis; ascis, paraphysibus non immixtis, membrana tenuissima maturescenti-dilabente tunicatis; ascosporis octonis, brunneis; conidiis oidiisve secundum varietatem; peritheciis 160-200 μ diam. longas ascosporarum catenas emittentibus; ascis sphaericis ellipsoideisve, 14-16 μ diam., 8-sporis; ascosporis utraque fine leniter aculeatis 5,4 μ longis. — Var. *Oidium*: Oidiis sporisve intercalaribus secus hyphas enatis, fere atris, pro more, 8 μ long., 5 μ lat. — Var. *Verticillium*: conidiis ut in *Verticillio* nascentibus, sphaericis, laevibus, brunneis 4 μ diam.

Hab. in silvis primaevis regionis Côte-d'Ivoire nuncupatae, Africae occidentalis (A. CHEVALIER).

Subfam. 3. Engleruleæ P. Henn.

Dispositio syst. generum secundum F. THEISSEN, Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 322, et THEISSEN et SYDOW, Ann. Mycol. 15., 1917, p. 467.

A. Perithecia parenchymatica, cellulis demum evanidis

I. Perithecia insidentia polyasca

a) Mycelium exhyphopodiatum

α Sporidia bilocularia

- | | |
|----------------------|-----------------------|
| 1. Hyalina | 1. EUTHRYPTON Theiss. |
| 2. Brunnea | 2. ENGLERULA P. Henn. |

- β Sporidia quadrilocularia hyalina . . . 3. THEISSENULA Syd.
 γ » 5-plurilocularia, filiformia . . . 4. HYALODERMA Speg.
 b) Mycelium hyphopodiatum
 α Sporidia bilocularia hyalina . . . 5. SCHIFFNERULA Theiss.
 β » » brunnea . . . 6. PHAEO-SCHIFFNERULA Ths.
 II. Perithecia persistenter pedicellata, monasca . . . 7. THRAUSTE Theiss.

B. Perithecia hyphis meridianis donata

I. Mycelium nullum

1. Asci infra filamenta paraphysoidea mucosa immersa. Sporidia hyalina unilocularia (matura plurilocularia?) . . . 8. SINTEXIS Theiss.
 2. Filamenta paraphysoidea nulla. Sporidia phaeodidyma . . . 9. RHIZOTEXIS Th. et Syd.

II. Mycelium parcum; strato ascigero capsula mucosa anhistia vestito

1. Paraphyses nullae; sporidia hyalina muralia . . . 10. NOSTOCOTHECA Starb.
 2. Paraphyses praesentes; sporidia filiformia . . . 11. OPHIOTEXIS Theiss.

III. Mycelium copiosum; perithecia fortiter incrustata; hyphae persistentes, circa perithecia stratum intricatum eiformantes; paraphyses nullae; sporidia bilocularia brunnea

1. Mycelium setulis destitutum; perithecia polyasca . . . 12. PARENGLERULA v. Höhn.
 2. Mycelium setulosum; perithecia monasca . . . 13. LINOTEXIS Syd.

Genera dubia: *Dimerosporiella* Speg., *Hyalotheles* Speg.

EUTHRYPTON Theiss., Verh. zool.-bot. Ges. Wien, Bd. 66, 1916, p. 306 (Etym. a *euthryptos*, quia perithecia facile evanida). — Mycelium superficiale, ramosum, septatum, exhyphopodiatum, pallidum, non setulosum. Perithecia globosa astoma, evanida. Asci numerosi, ovoidei, paraphysati, in muco immersi, octospori. Sporidia bilocularia hyalina.

1. *Euthrypton globiferum* (Ell. et Ev.) Theiss., l. c. — Ita vocanda est 4255 *Asterina globifera* Ell. et Ev. — Syll. XIV, p. 696.

ENGLERULA P. Henn. — Syll. XVII p. 529, XXII p. 26.

1. *Englerula mexicana* Theissen in Sacc., Ann. Mycol. XII, 1914, 4256 p. 301. — Mycelio hyphopodiis destituto, irregulariter effuso, tenui, hyphas *Asterinae Verae-crucis* ambiente, ex hyphis irregulariter ramosis, stramineis tenuiter septatis, 2,5-3,5 μ cr. flaccidis compo-

sito; peritheciis ad hyphas sessilibus, fuscis v. stramineo-fuscis ex cellulis angulatis 6-8 μ diam., parenchymatice efformatis, contextu tamen mox indistincto (cellulis mucose secedentibus), extus mucro indurato minime obtectis, intus mucro hyalino impletis; ascis fasciculatis aparaphysatis, clavato-cylindræis, 8-sporis; sporidiis distichis fusco-brunneis v. violaceo-brunneis, oblongis, medio septatis, utrinque rotundatis, 16 \approx 6, cellula superiore paullo latiore.

Hab. in foliis subvivi*s Laurineæ* ejusdam (*Litsææ*?), Veracruz Mexico (S. BONANSEA). — Socia adest *Asterina Verac-crucis* Theiss. An *Asterina insignis* Karst. et Roum., in Laurineis, hanc et *Asterinam Verac-crucis* Theiss. confuse complectitur?

2. **Englerula Strewiæ** Theiss., Verh. zool.-bot. Ges. Wien Bd. 66., 1916, 4257 p. 327. — Mycelio maculas 0,5-1 cm. diam. quandoque confluentes obscuras efformante; hyphis obscuris, reticulato-ramosis, exhyphopodiatis, 3-3,5 μ cr. laxè septatis; peritheciis hinc inde efformatis 35-50 μ diam. raro usque 75 μ , primum brunnescentibus demum nigris superficie asperula donatis, contextu cellulis minutis polygonalibus prædito; conidiferis conidia e piriformi ovoidea brunneo-nigricantia, levia unilocularia (*Asterostomellæ* ad instar) 25-28 \times 15-19 ferentibus; ascigeris monascis, ascis octosporis; sporidiis bilocularibus obscure brunneis, levibus utrinque rotundatis 26-30 \times 11-13, loculis quandoque inaequalibus.

Hab. in foliis *Strewiæ ambiguae*, Los Baños, Ins. Philipp. (RAIMUNDO).

THEISSENULA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 198 (Etym. a mycologo praeclaro FR. THEISSEN de studio Ascomycetum imprimis merito). — Subiculum tenue haud hyphopodiatum, conidia pluricellularia colorata generans. Perithecia in subiculo superficialia, sessilia, ovato-globosa, olivaceo-fusca, astoma, initio parenchymatice cellulosa, dein histolysis ope subanhistia. Asci aparaphysati, clavati, pauci, octospori. Sporidia anguste clavata hyalina, 1-septata, in maturitate 3-septata. — Gen. *Schiffnerulæ* proximum.

1. **Theissenula clavisporea** H. et P. Sydow, l. c. p. 198. — Subiculo hyphophyllo, tenui, maculiformi subradiante plagulas griseo-atras 1-4 mm. latas efformante; hyphis haud hyphopodiatis, variis, aliis longis rectiusculis v. parum flexuosis crassiuscule tunicatis obscure fuliginèis remote septatis (articulis 15-40 μ long.) 6-8 μ cr., aliis multo tenuioribus flexuosis copiosioribus tenuiter tunicatis 3-4 μ cr. dilute fuliginèis remote septatis (articulis 25-50 μ long.) et vix

ramosis; conidiis clavulatis, oblongis v. fusoides; plerumque 3-septatis, non constrictis, $30-60 \times 9-12$; peritheciis laxe gregariis, in subiculo superficialibus, ovato-globosis, haud ostiolatis, $40-65 \mu$ alt. $40-50 \mu$ latis, olivaceo-brunneis, tunica ex cellulis subparenchymaticis v. irregularibus subinde etiam lobulatis imbricatim positis prominulis $5-8 \mu$ latis composita; ascis paraphysatis ca $5-8$ in quoque perithecio, clavatis, tenuissime tunicatis, $22-25 \times 9-11$; sporidiis octonis, in medio asci parallele v. fasciculatim positis, anguste clavatis, superne rotundatis et crassioribus, inferne sensim attenuatis, ad basim acutiusculis, primitus continuis, sed mox 1-septatis, in maturitate 3-septatis, non constrictis, hyalinis, $15-16,5 \times 1,5-2$.

Hab. in foliis subvivi *Schizostachyi acutiflori* (Graminaeae), Los Baños prov. Laguna, ins. Philippinenses (S. A. REYES).

HYALODERMA Speg. — Syll. IX p. 437, XI p. 270, XIV p. 465, XVI p. 406, XXII p. 27.

1. *Hyaloderma Bakeriana* P. Henn., Hedw. vol. 48. (1908), p. 103. — Hy- 4259
 phis mycelii flavidulis, septatis, $3-4 \mu$ crassis; peritheciis superficialibus, sparsis, minutis, oculo nudo haud conspicuis, flavidis, udis ovoideis, tenuissime membranaceis, pellucidis, 250μ circ. diam., contextu subanhysto ex hyphis tenuibus radiantibus composito; ascis clavatis, rotundatis, octosporis, $90-160 \times 10-14$; sporidiis linearibus utrinque acutiusculis flexuosis, hyalinis, $3-7$ -septatis, $40-60 \times 3-3,5$.

Hab. in vaginis siccis *Bactridis majoris* (Palmae), socia *Cyphella paraënsis* P. Henn. in hyphis *Helminthosporii*, Hort. bot. Goeldi, Pará (C. J. BAKER).

2. *Hyaloderma depressulum* Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. 4260
 Nac. Ciencias Cordoba, t. 23., 1919, Extr. p. 93. — Subiculum latiuscule effusum atrum submembranaceum tenuissimum, ex hyphis tortuosis dense congestis chlorinis 3μ cr. efformatum; peritheciis sparsis v. laxe gregariis pusillis hemisphaericis, $75-125 \mu$ diam., basi plana subiculoque late adnatis superne anhystis chlorinis per aetatem subregulariter disruptis et pseudoostiolatis, inferne dense minuteque parenchymatico-sinuosis olivaceo-fuligineis; ascis obclavulatis apice abrupte subtruncato-rotundatis, basi obtuse cuneatis breviter crassiusculeque pedicellatis, 25×8 , paraphysibus undulatis crassis simplicibus longioribus obvallatis, 8-sporis; sporidiis linearibus arcuatis utrinque attenuato-acutis minute $7-11$ -guttula-

tis, hyalinis, $20 \approx 2.5$.

Hab. parasitica in subiculo *Meliolarum* v. *Asterinarum* ad folia viva *Abutilonis*?, *Apiahy* America austr. (J. PUIGGARI). — *H. inperspicuo* Speg. valde affinis sed differt peritheciis infra appllatis, paraphysibus, ascis sporidiisque minoribus.

3. *Hyaloderma Puiggarii* Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. 4261
Nac. Cienc. Cordoba, t. 23., 1919, p. 94. — Subiculum mucedineum parum evolutum et mox evanescens; peritheciis solitariis v. laxe 2-3 gregariis, globoso-depressis, perpusillis, 75-100 μ diam. glabris fusco-melleis in dimidio supero anhystris pallidioribus, in dimidio infero obsolete parenchymaticis infuscatisque; ascis subcylindraceis, antice obtuse rotundatis, deorsum cuneatis breviter graciliterque pedicellatis, aparaphysatis, octosporis, 65-70 \approx 8; sporidiis lineari-fusoides, utrinque acutis, leniter arcuatis, 40-50 \approx 1.5-2, 9-13-septatis hyalinis.

Hab. parasitica ad stromata *Polystomellae repandae* Speg. in foliis *Eugeniae*?, prope *Apiahy*, Amer. austr. (J. PUIGGARI). — *H. Glaziovii* Pat. videtur affinis.

PHAEOSCHIFFNERULA Theiss., Broteria 12., 1914, fasc. I, p. 21, fig. 1; Verh. zool.-bot. Ges. Wien Bd. 66., 1916, p. 336. — Est *Schiffnerula* phaeospora. Conidia mycelii quadrilocularia.

1. *Phaeoschiffnerula Compositarum* Theiss., l. c., fig. 1. — Maculis mycelialibus parvis nigricantibus irregulariter subgregariis; hyphis flexuosis 7-9 μ cr. pallide brunneis articulatis levibus ramosis et reticulum densum efformantibus; hyphopodiis numerosis, pallide brunneis e globosis hemisphaericis, insidentibus, levibus, continuis, 10-12 μ cr.; peritheciis sparsis, globosis, mycelii concoloribus, ostiolo parum distincto praeditis, 120-150 μ diam., demum apice late apertis; contextu primum distincte parenchymatico e cellulis 8-12 μ cr. efformato dein indistincto, circa ostiolum cellulis elongatis radiantibus obscurioribus, ascis 4-7, aparaphysatis, e late ellipsoideis late clavatis, 55-70 \approx 25-35, crasse tunicatis, octosporis; sporidiis uniseptato-constrictis, levibus, obscure brunneis 23-27 \approx 12-14, loculis plerumque parum inaequalibus. — Conidiis myceliis quadrilocularibus, rectis v. curvulis utrinque rotundatis, levibus 32-54 \approx 18-22, brunneo-fumosis, loculis duo apicalibus quandoque pallidioribus.

Hab. in foliis *Compositae* ejusdam, in silvis prope S. Leopoldo, Rio Grande do Sul, Brasilia (F. THEISSEN).

THRAUSTE Theissen, Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 337. — (Ety. a *thraustos*, ob perithecia evanida). — Mycelium superficialiter septatum, ramosum hyphopodiatum non setosum; perithecia pedicellata parenchymatica, demum evanida mucosa ascum solitarium continentia.

1. **Thrauste Medinillae** (Racib.) Theiss., l. c., p. 338 fig. 2. — Ita vo- 4263
canda est *Balladyna Medinillae* Racib., *Englerula Medinillae* (Rac.)
v. Höhn.
2. **Thrauste affinis** Syd., Ann. Mycol. 1917, p. 197. — Epiphylla, pla- 4264
gulas parum perspicuas 3-5 mm. diam. tenues orbiculares formans;
mycelium ex hyphis longiusculis rectiusculis fuscis septatis ramo-
sis 6-8 μ crassis compositum, hyphopodia numerosa alternantia,
semiglobolosa 10-13 μ alta vel lata, sessilia, continua; perithecia
copiosa, matura 30-50 μ alta vel lata, globulosa, immatura minora
et praecipue angustiora, prinitus membrana unistratosa brunneo-
parenchymatica obsita, demum, membrana externa irregulariter
disrumpente et secedente, stratum interius diaphanum hyalinum
relinquentia, stipite brunneo persistente 15-25 μ longo 7-9 μ crasso
suffulto; asci globosi vel subglobosi, 28-35 μ diam. aparaphysati;
sporaе conglobatae, oblongae vel ellipsoideo-oblongae, utrinque ro-
tundatae, medio 1-septatae et constrictae, maturae obscure brun-
nae, 20-25 \times 10-13 μ .

Hab. in foliis *Pygei* spec. (Rosaceae), Bontoc, Luzon, Ins.
Philipp. (H. S. YATES).

SYNTEXIS Theiss., Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 340
(Ety. a *syntexis*, quia perithecia evanida). — Mycelium nullum.
Perithecia infra tantum parenchymatica, caeterum ex hyphis eva-
nidis meridianis efformata. Asci numerosi aparaphysati in muco et
hyphis paraphysoides immersi, octospori. Sporidia hyalina unilo-
cularia fusoidea demum plurilocularia.

1. **Syntexis Tibouchinae** (P. Henn.) Theiss., l. c. p. 341, *Physalospora* 4265
Tibouchinae P. Henn., Fungi S. Paul. IV, Hedwigia v. 48., 1908,
p. 9. — Maculis rotundatis, brunneo-fuscis; peritheciis gregariis,
epiphyllis, erumpenti-superficialibus, subglobosis vel ovoideis. fuscis,
150-200 μ diam.; ascis clavatis, vertice rotundatis, octosporis, 55-
60 \times 12-16, paraphysibus filiformibus hyalinis 2 μ crassis; sporidiis
subdistichis, oblongis, clavatis vel subfusoideis, obtusis, hyalinis,
continuis, 15-20 \times 4-5.

Hab. in foliis *Tibouchinae* (Melastomataceae), Serra da

Cantareira, S. Paulo, Brasilia.

RHIZOTEXIS Theiss. et Sydow, Ann. Mycol., 15., 1917, p. 140 et 469. —

Perithecia ex hypostromate epidermico orta, globosa, astoma, membrana extus obscura minute parenchymatica, demum mucosa, intus ex hyphis meridians constituta, pallida, matura etiam plus minus mucoso-evanescenti. Asci pauci, aparaphysati octospori. Sporidia brunnea bilocularia.

1. **Rhizotexis Bauhiniarum** (P. Henn.) Th. et Syd., l. c. — Ita vocanda 4266
Parodiella Bauhiniarum P. Henn., Syll. XVII p. 541.

OPHIOTEXIS Theiss., Verb. zool.-bot. Ges. Wien Bd. 66., 1916, p. 345. —

Paraphyses et sporidia filiformia; caeterum ut in gen. *Nostocotheca* Starb., Syll. XVI p. 806.

1. **Ophiotexis perpusilla** (Speg.) Theiss., l. c. — Ita vocandum est *Hyaloderma perpusillum* Speg. — Syll. IX, 438 (= *Pseudomeliola perpusilla* (Speg.)-Rehm). 4267

PARENGLERULA v. Höhnelt, Fragm. z. Mykol. X n. 525 in Sitzb. k.

Ak. Wiss. Wien, math.-naturw. Kl., 119. Bd., Abth. I, 1910, p. (465) 73. — Subiculum brunneum, superficiale, ex hyphis hyphopodiatis efformatum. Perithecia globosa, parietibus demum evanidis et in filamentis mucosis paraphysoides ascos circumdantibus mutatis. Paraphyses nullae. Asci pauci, ovoidei, octospori. Sporidia brunnea, bilocularia.

1. **Parenglerula Mac-Owaniana** (Thüm.) v. Höhn. — Ita vocanda *Meliola Mac-Owaniana* Thüm. et *Asterina Mac-Owaniana* Kalch. et Cooke, Syll. I p. 41. 4268

LINOTEXIS Syd., Ann. Mycol. 1917, p. 197. — Mycelium copiose evolu-

tum, superficiale, hyphopodiatum, setigerum. Perithecia ovato-globosa, pariete histolysis ope in hyphas dissoluto, mono-ascigera. Asci ovati, octospori; aparaphysati; sporae fuscae, bicellulares.

1. **Linotexis philippinensis** Syd., Ann. Mycol. l. c. p. 198. — Epiphylla, 4269
plagulas primitivas minutas, sed mox confluentes majores et effusas saepeque totam folii superficiem occupantes formans; mycelium copiose evolutum, ex hyphis rectis valde ramosis septatis obscure brunneis 6-8 μ crassius compositum; hyphopodia numerosa, alternantia, continua, subglobosa vel ovata aut breviter crasseque cylindracea, rotundata, semper integra, 10-12 μ longa, 8-10 μ lata;

setae mycelii copiosissimae, rigidae, basi saepe geniculatae, ad apicem acutae, atrae, opacae, 60-100 μ longae, inferne 6-7 μ crassae; perithecia dense aequaliterque disposita, ovato-globosa, 50-80 μ alta, 40-60 μ lata, extus primitus atra et muco, dein evanido, obtecta, pariete dein lysis ope in hyphas 58-80 μ longas 3-4 μ crassas flavo-brunneolas dissoluto, monascigera; asci ovati, 40-60 \times 35-50, octospori, paraphysati; sporae ellipsoideo-oblongae, utrinque rotundatae, medio septatae et valde constrictae, loculis tandem secedentibus, in maturitate atrae, opacae, constrictae, 27-32 \times 12-13 μ .

Hab. in foliis indetermin. verisimiliter *Sapindaceae* ejusdem, prov. Rizal Ins. Luzon, Philipp. (M. RAMOS).

Subfam. 4. Perisporiæ

Dispositio sec. THEISSEN et SYDOW, Ann. Myc. XV, 1917, p. 457 (Perisporiaceae Fl.).

A. Perithecia v. mycelium innata

- | | |
|--|---|
| I. Perithecia subepidermica; asci polyspori;
sporidia hyalodidyma | 1. PAMPOLYSPORIUM Magn.
= Polysporidium Syd. |
| II. Perithecia libera, hypostroma subcuticulare;
sporidia phaeodidyma. | |
| 1. Perithecia singula | 2. ALINA Rac. |
| 2. Perithecia circa stroma sclerotiaceum
gregaria | 3. LASIOBOTRYS Kze |
| III. Perithecia v. mycelium e stomatibus tantum
orientibus. | |
| 1. Mycelium parce evolutum setulis destitutum;
sporidia phaeodidyma, loculis inaequalibus | 4. STOMATOGENE Theiss. |
| 2. Mycelium copiosum setulosum; sporidia
ut supra | 5. PILINE Theiss. |

B. Perithecia et mycelium superficialia

- | | |
|---|--------------------------|
| I. Mycelium hyphopodiatum | |
| 1. Setulae nullae v. atypicae; perithecia e
firma carbonacea; sporidia phaeophragmia (4-5 loc.). | 6. IRENE Theiss. et Syd. |
| 2. Setulae praesentes | |
| a) Setulae peristomales in statu pycnidico
tantum praesentes; hyalosporus | 7. CLEISTOSPHERA Syd. |

- b) Setulae in peritheciis et mycelio praesentes; sporidia phaeophragma (4-5 loc.) 8. MELIOLA Fries
= Myxothecium Kze

II. Mycelium exhyphopodiatum

1. Setulae praesentes
 - a) Sporidia hyalodidyma; mycelium simplex filamentosum 9. DIMERIELLA Speg.
 - b) Sporidia phaeodidyma; mycelium ut supra 10. PHAEODIMERIELLA Sp. 1908
= Phaeodimeriella Th. 1912
 - c) Sporidia phaeophragma (4-5 loc.); mycel. ut supra 11. MELIOLINA Syd.
 - d) Sporidia brunnea unilocularia; hyphis mycel. ramulis setuliformibus stellatis praeditis 12. TERRATONEMA Syd.
2. Setulae nullae v. atypicae
 - a) Perithecia hyphis filiformibus tecta
 - α) Pili breves, sparsi; sporidia hyalodidyma 13. RIZALIA Syd.
 - β) Pili longi, densi; sporidia phaeophragma (4-loc.) 14. HARARA Sacc. et Syd.
 - b) Perithecia glabra
 - α) Sporidia hyalodidyma
 - *. Perithecia rubra, membranacea; asci globoso-ellipsoidei 15. CHRYSOMYCES Theiss. et [Syd.
 - ** Perithe. nigra, e membran. coriacea; asci cylindraceo-clavati 16. DIMERINA Theiss.
 - β) Sporidia phaeodidyma
 - *. Perithecia rubra, firma; asci globoso-ellipsoidei 17. PARODIOPSIS Maubl.
 - ** Perithecia nigra; asci cylindraceo-clavati 18. DIMERIUM Sacc. et Syd.
 - γ) Sporidia phaeophragma (3-loc.) mycelium pilis erectis praeditum; perithecia membranacea 19. PERISPORINA P. Henn.

Genera dubia:

- Sporidia hyalina continua: *Meliolopsis* Sacc.
Sporidia hyalina continua trigona: *Micromastia* Speg.
Sporidia hyalodidyma: *Eudimeriolum* Speg.
Sporidia brunnea continua: *Orbicula* Cooke

Genera removenda:

- Winteromyces* Speg. (W. caespitosus (Wint.) Speg.) = *Gibbera Mikaniae* (P. Henn.) Rick et Theiss.
Mycogala Rost. = *Aspergillaceae*
Dimerosporium Fuck.

Schenckiiella P. Henn. = Agyriaceæ

Argynna Morg.

Parodiella Speg. = Pseudosphaeriaceæ

Neorhemia v. Höhn. = Sphaeriaceæ

Acanthostoma Th. = Sphaeriaceæ

Scyphostroma Starb.

Mairella Syd. = Dothideaceæ

Cleistotheca Zuck. = Pleospora

Perisporiella P. Henn. = Hypocreella

Pleomeliola Sacc.

Saccardomyces P. Henn. = Hypocreaceæ v. Sphaeriaceæ

Ferrarisia Sacc. = Microthyriaceæ (= ? *Seynesia Ipomoeae* Syd.)

Ophiomeliola Starb. = Pseudosphaeriaceæ

Sect. 1. Hyalosporae

*) **APIOSPORIUM** Kunze — Syll. I p. 30, IX p. 375, XVI p. 408, XVII pag. 531.

1. **Apiosporium atrum** Massee, Bull. Bot. Gard. Kew, 1913, p. 104. — 4270

Mycelio plagulas atras suborbiculares, saepe confluenti-irregulares, velutinas, matrici arcte adnatas efformante; peritheciis centro plagarum densissime aggregatis, udis globosis, siccis cupulato-collapsis, 200-300 μ diam., basi setulis cinctis, contextu indistincto atro; ascis ovatis, deorsum in pedicello longissime productis, polysporis; sporidiis cylindraceis, hyalinis, continuis, 9-12 \times 2-2,5. Adest quoque status pycnidicus.

Hab. in ramulis dejectis (« Para rubber trees » dicti), Kuala Lumpur, Malay States (C. K. BANCROFT). — Affine *A. australi* Speg.

CLEISTOSPHAERA Syd., Ann. Mycol. 1916, p. 74 (Etym. *cleistos* clausus et *sphaera*). — Perithecia minuta, in mycelio superficiali ex hyphis fuscis hyphopodiatis composito nidulantia, globosa, astoma, atra membranaceo-coriacea, parenchymatice contexta, glabra. Asci ovati vel saccati, 8-spori, aparaphysati, sporidia, ellipsoidea, continua, hyalina. — Cum gen. *Meliolopsis* Sacc. comparandum, Syll. I p. 25 et 68, IX p. 375, XXII p. 31.

1. **Cleistosphaera macrostegia** Syd., l. c. p. 75 fig. 1. — Hypophylla, fo- 4271
liola omnino vel fere omnino obtegens; mycelio ex hyphis fusco-

*) Sec. THEISSEN et SYDOW, Ann. Mycol. 15., 1917, p. 483, gen. hoc reiciendum et ob spec. typ. *Apiosp. Salicis* Kze., ut fungum imperfectum habendum.

brunneis 6-8 μ crassis, rectis vel subrectis vix vel parum ramosis remote septatis (articulis 20-60 μ longis) tenue tunicatis; saepe composito; hyphopodiis paucis, continuis, sessilibus, valde variabilibus, saepe lobatis, usque 28 μ longis, peritheciis in mycelio dense sparsis usque gregariis, superficialibus, globosis, astomis, 120-160 μ diam., grosse parenchymatice fuscae contextis, cellulis 15-20 μ haud raro etiam usque 25 μ diam.; ascis ovatis vel saccatis apophysatis, basi in stipitem brevem attenuatis, 65-80 \times 25-30, octosporis; sporidiis di-tristichis, ellipsoideis, utrinque obtusis, intus nubilosis, hyalinis, 21-23 \times 10; pycnidiis simul praesentibus, ovato-globosis usque globosis, 60-105 μ diam., parenchymatice ex cellulis minutis, 4-5 μ diam. dilute fuscis contextis, poro erecto distincto 15-20 μ lato ex duabus seriebus cellularum obscure brunnearum crassius tunicatarum composito praeditis, circa porum setulis paucis continuis obtusis dilute brunneis apicem versus subhyalinis, 20-30 \times 3,5-4,5 obsitis; sporulis ellipsoideis, continuis, flavidulis v. pallide flavo-brunneolis, minute 1-2-guttulatis, 5-6,5 \times 2,5-3.

Hab. in foliis *Piptadeniae* sp. (?) (Leguminosae), Seringal, Auristella, Rio Acre, Peruviae (E. ULE).

EPIPHYMA Theissen, Verh. zool. bot. Ges. Wien, Bd. 66., 1916, p. 306, Ann. Mycol. 14., 1916, p. 404. — Est *Parodiella* hyalospora. — Typ. gen. *Epiph. laurinum* (Oke) Th. (= *Phyllachora laurina* Oke., Ph. mexicana Sacc., Ann. Myc. 1913, p. 547); *Epiph. anceps* (v. H.) Th.

1. *Epiphyma neurophilum* Theissen, Ann. Mycol. 14., 1916, p. 404. — 4272
Hypophylla. Peritheciis opace nigris, subgloboso-turbinatis, subepidermicis, secus nervos seriatis, 350-400 μ cr., basi 140 μ latis; contextu stromatico 35 μ cr.; ascis cylindraceo-clavatis, supra parietibus crassis praeditis, parte sporifera 130-150 \times 12, pedicello usque 80 μ longo, octosporis; sporidiis monostichis obtuse rotundatis, hyalinis, unilocularibus 18-20 \times 8-10. — Perithecia setulosa.

Hab. in foliis *Tibouchinae* sp. (Melastomataceae), prope Medellín Columbia (E. MAYOR)

2. *Epiphyma Premnae* Syd., Ann. Mycol., 15., 1917, p. 217. — Stromata 4273
perithecioidea, superficialia, hypostromate epidermali suffulta, epiphylla, plagulas orbiculares 1-1,5 cm. latas tandem saepe confluentes formantia, in hypophyllo contrapósito maculas fusciculas indeterminatas efficientia, arctissime congregata, globulosa, saepe leniter depressa et in sicco umbilicata, astoma, 200-250 μ diam., pa-

renchymatice e cellulis atro-olivaceis vel atro-viridulis 6-8 μ diam. contexta, pariete crasso 30-50 μ , ad apicem saepe etiam crassiore; asci clavati, apice rotundati, breviter stipitati, 36-45 \times 10-12, octospori; sporae distichae oblongae, continuæ, utrinque rotundatae, rectae, biguttulatae, 10-12 \times 3-4.

Hab. in foliis *Premnae Cumingianae* (Verbenaceae), Los Baños, Laguna. Ins. Philipp. (C. F. BAKER).

Sect. 2. Phaeosporae

CHAETOMIDIUM Zopf. — Syll. I p. 39, IX p. 378, XXII p. 32.

1. *Chaetomidium barbatum* Traaen, Norw. in *Nyt. Mag. Natuwid. Chri-* 4274
tiania 1914, p. 37, t. IV f. 5-8. — Mycelio peritheciis dense aggregatis viridibus aut fuscis tecto; hyphis repentibus et adscendentibus ramosis, septatis, hyalinis, 0,5-5 μ diam.; peritheciis ovoideis v. ellipsoideis v. ovatis, 50 μ ad 1 mm. altis, contextu tenui fragili piloso praeditis; pilis simplicibus, septatis, rectis v. undulatis v. tortuosis 2-4 μ cr., brevibus v. usque ad 1 mm. long. viridi-fuscis; ascis clavatis, apice rotundatis 24-60 \times 9,5-14, 8-sporis, mox diffuis; sporidiis late ellipsoideis, utrinque brevissime apiculatis, 8-11 \times 7-8, fusco-violaceis, concavo-convexis, e latere 4-5 μ cr.

Hab. ad terram humosam pr. Christianiam in Norvegia. Ob peritheciis ostiolatis est *Chaetomium*, et *Ch. globoso*, pertinens (Cl. TRAAEN in litt.).

ASCOTRICHA Berk. — Syll. I p. 37.

1. *Ascotricha pusilla* (Ell. et Ev.) Chivers, Monogr. *Chaetomium* p. 220, 4275
 tab. 17 fig. 13-21 (1915). — Ita vocandum *Chaetomium pusillum* Ell. et Ev. seu *Ch. Ellisianum* Sacc. et Syd. — Syll. XIV, 491.

GUTTULARIA Obermeyer, Mycol. Centralbl. III (1913) p. 9 (Etym: *guttula*). — Perithecia sphaeroidea, initio pallida dein brunnea, excipulo pluristratoso praedita, fasciculos hypharum in hospiti hymenium immittentia sed mycelio-distincto carentia. Asci aparaphysati sphaeroidei vel ovati, octospori. Sporidia ellipsoidea, utrinque attenuata, majuscula, unilocularia, demum fusco-brunnea. — Inter *Orbiculam* Oke. et *Pseudomeliolam* Speg. locandum; ad *Melanosporam* inter *Hypocreaceas* vergens.

1. *Guttularia Geopora* Oberm., l. cit. — Peritheciis usque ad 250 μ diam., 4276
 diu clausis dein prope apicem irregulariter fissis, excipulo 25-35 μ

circ. crasso; ascis ovoideis, 80-40, tunica cito diffuente praeditis; sporidiis ellipsoideis, utrinque attenuatis, grosse guttulatis, 28-30 \times 12-13, maturis fusco-brunneis.

Hab. parasitica in hymenio *Geopora* graveolentis, Schwarzwald in Württemberg, Germania.

FERRARISIA Sacc., Notae Mycol. XXIII (Acc. Ven. Trent. 1917) (Etym. a cl. mycologo italico TH. FERRARIS).—Perithecia globulosa, subiculo carentia, membranacea, nigricantia, ostiolo gennino nullo, sed demum late rimose hiantia, contextu grumoso indistincte celluloso. Asci ovoidei, aparaphysati, octospori. Sporidia ovoidea minuta, continua, fuliginea. — Notis datis a ceteris Perisporiaceis videtur distinctum genus.

1. *Ferrarisia philippina* Sacc., l. c. — Peritheciis epiphyllis, dense maculiformiter gregariis, irregulariter globosis perexiguis, 45-55 μ diam., superficialibus, subiculo nullo insidentibus, vertice demum stellatim v. irregulariter rimosis, nigris; ascis in quoque perithecio paucis (3-6) ovato-ellipsoideis, sessilibus, 20 \times 14-15, octosporis, aparaphysatis, sporidiis distichis, ovoideis, diu hyalinis dein fuligineis, 6 \times 4,7; levibus, eguttulatis. 4277

Hab. in foliis subvivi*s Merremiae* sp. (Convolvulaceae), Los Baños, Ins. Philipp. — Subiculo deficiente et fabrica sporidiorum mox distinguitur. Theissen et Sydow, Ann. Mycol. 1917, p. 416 et p. 467, contendunt hoc genus cum *Seynesia Ipomoeae*, Microthyriaceae sporidiis phaeodidymis triplo majoribus collidere! Cum exemplar meum non viderint, certe aliam rem sub oculis habuerunt, nec haec modus critice est laudandus (P. A. SACCARDO in ms.).

TERATONEMA Sydow, Ann. Mycol. 15., 1917, p. 180 — Mycelium effusum, compactum, tomentosum, atrum, subcrustaceum, ex hyphis corniculariiformibus ramosis (ramis repetito asteroideo-aculeatis) compositum; perithecia superficialia, globoso-conoidea, parenchymatice contexta, coriacea, saepe ad verticem setis paucis fasciculatis obsita, alibi levia, glabra, atra, astoma (ut videtur); asci minuti, clavulati, facillime diffuentes, octospori, aparaphysati², sporae continuae, minutae, hyalinae, tandem ut videtur fuscae. 4278

Huc pertinet, sec. Sydow, *Asterula corniculariformis* P. Henn. (Syll. XIV p. 692) = *Orbicula Rickenii* Rich., Syll. XVII p. 533.

Sect. 3. Hyalodidymae

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV p. 466, XVI p. 408, XVII p. 533, XXII p. 33. — Sec. Theissen et Sydow, Ann. Myc. 15., 1917, p. 421, gen. hoc idem est ac *Asterina* Lév. et tunc ad Microthyriaceas adscribendum.

1. *Dimerosporium agavectona* Pat. et Har., Bull. Soc. Mycol. Fr. 1912, 4279 p. 282 (corr. *agavectonum*). — Maculis praecipue hypophyllis, orbicularibus, sparsis confluentibusve, 5-30 mm. latis cinereo-atris, ex hyphis subsuperficialibus, radiantibus, tenuissimis, 4-5 μ crassis, ramosis, transverse septatis, hyphopodiis destitutis, laxissime intricatis, prostratis, substrato arcte-adnatis stomatum per orificium exeuntibus, constitutis; peritheciis subastomis dense gregariis, concoloribus, sursum rotundatis, rugosiusculis, deorsum applanatis 70-90 μ altis, centro in pedicellum aequilongum, cylindraceum, concolorem, stomatum cavitatem replentem abrupte attenuatis, contextu minute pseudoparenchymatico; ascis piriformibus, subsessilibus, apice rotundatis crassiusculeque tunicatis, 36-40 \times 25, octosporis, paraphysatis, jodi ope non coerulescentibus; sporis primitus hyalinis dein fusco-brunneis, elongatis, rectis, utrinque rotundatis una fine sensim attenuatis, transverse inaequaliter septatis, paululum constrictis, laevibus, 26 \times 8.

Hab. in foliis vivis *Agaves Salmianae* (Amaryllidaceae), quae valde necat, in montibus mexicanis regionis Tolucae (Sierra de Tlalpujahu) 2400 met. inter et 2700 (DIGUET).

2. *Dimerosporium bignoniicola* Speg., Mycet. Argent. VI, Anal. Mus. 4280 Nac. Buenos Aires XXIII p. 35 (1912). — Peritheciis sparsis vel pauci gregariis sessilibus vel brevissime crasseque subpedicellatis, ovato-subglobosis, 75-150 μ diam., atris, ostiolo prominulo saepe valide umbonato praeditis, glabris, udis turgidis, siccis collabescentibus, subiculo proprio destitutis, mycelio *Meliolae* insidentibus, contextu membranaceo, circa ostiolum compactiore et obscuriore; ascis cylindraceo-clavatis, breviter pedicellatis, 40-45 \times 9-10, octosporis, paraphysibus filiformibus parum longioribus commixtis; sporidiis distichis, ellipsoideis, rectis vel leniter inaequilateris, 12 \times 3, utrinque acutiuscule rotundatis, medio septatis, vix constrictis, hyalinis, non vel grosse guttulatis.

Hab. in foliis vivis *Bignoniae* (Bignoniaceae) cujusdam in silvis, prope Bompland, Misiones: Argentina.

3. *Dimerosporium Cordiae* P. Henn, Hedw. vol. 48 (1908) p. 4. — Pe- 4281
 ritheciis epiphyllis, sparsis vel caespitosis, globulosis, atris, astom-
 is, 60-90 μ diam., hyphis atrofuscis ca. 3 μ cr., apice palmato-
 ramosis; ascis clavatis, apice rotundatis, tunicatis octosporis, pa-
 raphysatis, 35-53 \times 10-12, sporidiis subdistichis, ovoideis, 1-septatis,
 constrictis, hyalinis, 10-12 \times 4-4.5.

Hab. in foliis *Cordiae* sp. (Borraginaceae). S. Paulo, Capital,
 Brasilia. — A *Dim. cordicola* P. Henn. et *D. subpiloso* Wint. di-
 stinctum.

4. *Dimerosporium balsamicola* (Peck.) Ell. et Ev., N. A. Pyr. p. 728, 4282
 Sacc., Ann. Myc. XIII n. 2 (1915) p. 113. — *Meliola balsamicola*
 Peck (1881), *Zukalia balsamicola* (Peck.) Sacc., Syll. IX p. 432, *A-*
sterella nuda Peck (1885), *Cryptopus nudus* (Peck) Theiss.

Hab. in foliis *Abietis balsameae* (Coniferae), Tup-
 per Lake (HOUSE).

Obs. Perithecia atro-nitidula 80-90 μ d.; hyphae septatae 5-7 μ
 cr., guttulae luteo-fuligineae; asci 38-40 \times 9-12, octospori, para-
 physibus diffuentibus cincti; sporidia disticha, oblonga, utrinque
 rotundata, 11-12 \times 4, hyalina, 1-septata, leviter constricta.

5. *Dimerosporium Ingae* P. Henn., Hedw. vol. 48 (1908) p. 4. — Cae- 4283
 spitulis epiphyllis, gregariis, atris, pulvinato-rotundatis, 1 mm. ca.
 diam., hyphis atrofuscis, ramosis, septatis, 3-8 μ crassis, radian-
 tibus, conidiis oblongo-cylindraceis vel clavatis, brunneis, medio
 1-septatis, 40-60 \times 8-10; peritheciis caespitosis, globulosis, atrofus-
 cis, cellulosis, 150-200 μ diam., ascis clavatis, apice obtuso-rotun-
 datis tunicatis, octosporis, 70-85 \times 23-30; sporidiis subtristichis vel
 conglobatis, oblongis, subfusoides vel clavatis, medio 1-septatis,
 hyalinis, 40-52 \times 7-8.

Hab. in foliis *Ingae* sp. (Leguminosae), Serra da Cantareira,
 S. Paulo, Brasilia.

6. *Dimerosporium Parkinsoniae* Heald et Wolf, Mycologia, 1911, p. 5. — 4284
 Myceliis effusis, ramosis, septatis, brunneis; conidiis atro-brunneis,
 uniformiter 1-4-locularibus; peritheciis gregariis, atris, subglobo-
 sis; ascis octosporis, 45-50 \times 12-15; sporidiis inaequaliter bilocu-
 laribus, guttulatis, hyalinis.

Hab. in foliis, ramulis, raro in ipso cortice levigato ramorum
Parkinsoniae aculeatae (Leguminosae), frequens, Texas
 Amer. bor. — Plagulas effusas fuliginosas efformat.

7. *Dimerosporium Strychni* P. Henn., Hedw. vol. 48 (1908) p. 5. — Ma- 4285
 culis mycelii amphigenis, effusis, fuscis, radiantibus; peritheciis

sparsis vel gregariis, globosis, astomis, atro-membranaceis, 90-100 μ diam.; ascis clavatis, obtusis, 8-sporis, paraphysatis, 26-35 \times 8-10; sporidiis subdistichis, ovoideis, medio 1-septatis, hyalinis, 5-6 \times 3.

Hab. in foliis *Strycchni* (Loganiaceae), Capital, S. Paulo, Brasilia.

8. *Dimerosporium lussoniense* Sacc., Ann. Mycol. XII, 1914, p. 303 — 4286

Plagis epiphyllis adpressis, orbicularibus 1,5-2 mm. diam., interdum confluentibus et areas latas occupantibus, aterrimis, opacis ex hyphis radiantibus efformatis; hyphis filiformibus plerumque in fasciculos 15-20 μ cr. conglutinatis, leviter sinuosis non v. parce septatis, 3,5-4 μ crass.; peritheciis globulosis in centro plagae gregariis globoso-depressis, nigris, 176-200 μ diam., centro leviter umbilicatis, subastomis; ascis crasse cylindraceis, apice rotundatis, brevissime crasse stipitatis, 45-50 \times 10-12, octosporis, paraphysibus guttulatis, crassinseculis obvallatis, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 11-12 \times 3,6-4, medio septatis non v. vix constrictis, loculo inferiore lenissime angustiore, e hyalino dilutissime chlorinis, initio (?) velo tenuissimo mucoso obductis.

Hab. in foliis *Pittospori* sp. (Pittosporaceae), Bontoc, Bauco, Luzon (Lussonia) Ins. Philippin. (M. v. OVERBERGH).

9. *Dimerosporium albo-marginatum* Sacc., Notae Mycol. XXIV p. 2 (Bull. 4287

R. Orto bot. Nap. 1918). — Coloniis epiphyllis, dense sparsis, superficialibus, subcircularibus, 2-3 mm. diam., nigris, subiculo eximie albido-marginato insertis, subiculo margine ex hyphis filiformibus intertextis, radiantibus dilute ochraceis 80-95 \times 1,5-2,5 subcontinuis (hyphopodiis nullis) formato; peritheciis hypothallo brunneo, hyphopodiis (?) globosis 12 μ diam. praedito insertis, globulosis, confertis, astomis 85-95 μ diam. glabris, contextu parenchymatico fuligineo; ascis clavato-fusoideis, paraphysatis, 45-50 \times 8, breviter stipitatis, apice obtusulis, octosporis; sporidiis distichis s. oblique monostichis, fusiformibus utrinque acutis, saepe curvatis, 16-17 \times 2,4, hyalinis, medio 1-septatis non v. vix constrictis.

Hab. in foliis subviviis *Sterculiae* sp. (Sterculiaceae) in Horto bot. Singapore (BAKER). — Eximia species peritheciis maculiformiter confertis nigris, halone thallino albido cinctis praedicta. Ad quod genus neotericorum spectare possit haec species, A. nescit.

10. *Dimerosporium pelladense* P. Henn., Hedw. vol. 48 (1908) p. 4. — 4288

Caespitulis epiphyllis, gregariis, atro-crustaceis, rotundatis, usque ad 1 mm. diam.; hyphis repentibus atro-fuscis, 3-3,5 μ crassis; pe-

peritheciis lenticularibus, astomis, atro-carbonaceis, 70-90 μ diam.; ascis clavatis, apice rotundatis tunicatis; octosporis, paraphysatis, 30-40 \times 14-20; sporidiis subdistichis, ovoideis, hyalinis, medio septatis, 12-14 \times 5-6.

Hab. in foliis *Rubiaceae*, Morro Pellado, S. Paulo, Brasilia.

DIMERINA Theiss., Beih. Bot. Centralbl. 29., 1912, Abt. II p. 46; Theissen et Sydow, Ann. Mycol. 15., 1917, p. 464. — Est *Dimerium* hyalodidymum.

1. *Dimerina Podocarpi* H. et P. Syd., Ann. Mycol. XI, 1913, p. 57. — 4289

Peritheciis hypophyllis, in mycelio parco vix visibili ex hyphis fusculis v. flavo-fuscis brevibus parce ramosis remote septatis 3-4 μ cr. composito superficialiter insidentibus, in costa acuum centrali sparsis v. subgregariis, globosis, atris, astomis, glabris, 120-160 μ diam., contextu opaco indistincte parenchymatico; ascis ovato-globosis, ovatis usque saccatis, apice valde incrassatis, 40-55 \times 22-30, octosporis, paraphysatis; sporidiis di-tristichis, ellipsoideo-fusoideis, utrinque leniter sed obtuse attenuatis, medio 1-septatis non constrictis, hyalinis, 20-24 \times 8-9.

Hab. in foliis *Podocarpi macrophylli* (Coniferae), Kawanye-mura prov. Minō, Japonia (K. HARA).

2. *Dimerina samarensis* Syd., Ann. Mycol. XV, 1917, p. 198. — Epiphylla, 4290

plagulas minutas tenuissimas orbiculares formas, mycelium parce evolutum, ex hyphis flexuosis flavo-brunneis 2-2,5 μ crassis compositum; perithecia dense aequaliterque sparsa, exigua, globoso-conoidea vel conoidea, 50-70 μ alta, 40-55 μ lata, glabra, levia, fere astoma, parenchymatice e cellulis 5-7 μ diam. flavo-brunneis contexta; asci paraphysati, saccati, octospori, 25-35 \times 12-16; sporae plerumque distichae, oblongae utrinque obtusae, medio septatae et leniter constrictae, hyalinae, 11-13 \times 4.

Hab. in foliis *Malloti* sp. (Euphorbiaceae), Catubing River, Samar, Ins. Philipp. (M. RAMOS).

3. *Dimerina Jacquiniæ* Ph. Garman, Mycologia v. VII, 1915, p. 337. — 4291

Maculis parvis, 0,25 μ diam., e peritheciis minutis, nigris, numerosis, circ. 10, efformatis; mycelio laxo, parum copioso, rubrido; peritheciis nigris, 48-60 μ diam.; ascis hyalinis, ovatis, 26,4 \times 12; sporis angustis et hyalinis, 14,4-17 \times 3,6.

Hab. in foliis *Jacquiniæ barbasco* (Myrsinaceae), Mona Island Porto Rico.

4. *Dimerina monensis* F. L. Stevens, Bot. Gazette 69., 1920, p. 254, 4292

tab. XIV fig. 20.— *Epiphylla* raro *hypophylla*, effusa; mycelio superficiali, parco, obscuro, irregulari, hyphis $3\ \mu$ cr. ramulis tenuibus praedito, exhyphopodiato; peritheciis irregulariter sphaeroides rugosis, $45-60\ \mu$ diam., astomis, in subiculo obscuro 10 v. ultra aggregatis v. confertis; greges usque $150-300\ \mu$ diam.; ascis numerosis, ellipsoideis obtusis, $34 \approx 17$, octosporis; sporidiis inordinatis, hyalinis v. pallidissime fumosis, obtusis, bilocularibus, $13-16 \approx 3$.

Hab. in foliis *Jacquiniæ barbasco* (Myrsinaceae), Mona Island, Porto Rico. — Verisimiliter eadem est ac precedenti.

5. *Dimerina Graffii* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. 4293 of Sci. VIII (1913) p. 269. — In mycelio *Meliolae* parasitica; hyphis tenuibus, *Meliolae* mycelium ambientibus, olivaceo-fuscidulis, vel viridulo-fuscidulis, ramosis, remote septatis, anastomosantibus, $1.5-2.5\ \mu$ latis; peritheciis densiuscule dispositis, globosis, atris, astomis, glabris, levibus, $40-130\ \mu$ diam., contextu firmo parenchymatico e cellulis $7-9\ \mu$ longis composito; ascis clavatis, vel crasse cylindraceis, apice obtusis, sessilibus, filiformiter paraphysatis, $25-35 \approx 12-15$, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, medio 1-septatis, non vel vix constrictis, hyalino-viridulis, $10-12 \approx 3-3.5$, cellula superiore parum latiore.

Hab. in mycelio *Meliolae* sp. ad folia *Gmelinae philippinensis* (Verbenaceae), Luzon, Prov. Bataan, Limay (P. W. GRAFF).

EUDIMERIOLUM Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII, p. 36 (1912). — Perithecia superficialia, astoma, subiculo praedita, glabra. Asci paraphysati octospori. Sporidia didyma, hyalina.

1. *Eudimeriolum elegans* Speg., loc. cit., cum ic. — Peritheciis hypophyllis, minutis, sparsis, inter pilos prominulis, subiculo parcissimo ex hyphis chlorinis, $5-6\ \mu$ cr., parce ramulosis formato insidentibus, globosis vel globoso-depressis, $120-180\ \mu$ diam., irregulariter dehiscentibus, membranaceis; ascis cylindraceis, deorsum sensim leniterque attenuatis, vix pedicellatis, $60-70 \approx 8-10$, paraphysibus filiformibus, tenuibus, parum longioribus copiose obvallatis; sporidiis ellipsoideo-elongatis, subfusoides vel subclavulatis, medio septatis, non v. vix constrictis, hyalinis, per aetatem leniter chlorinis, $14-15 \approx 4-5$.

Hab. in foliis vivis *Lueheae divaricatae* (Tiliaceae), prope Puerto León, Misiones: Argentina.

DIMERIELLA Speg. — Syll. XXII, p. 37.

1. *Dimeriella annulata* P. et H. Syd., Ann. Mycol. X, 1912, p. 36. — My- 4295
celio amphigeno, tenuissimo et parce evoluto, sed amoene in annulos concentricos evoluto et circulos $\frac{3}{4}$ -1 cm. diam. efformante, ex hyphis tenuibus parce ramosis dilute brunneis hinc inde conidia sarciniformia transverse 3-septata longitudinaliter 1-septata dilute brunnea 12-17 μ longa 7-10 μ lata gerentibus composito; peritheciis superficialibus globosis, atris, astomis, sub microscopio fuliginis, 50-100 μ diam., setis parvis rigidis atro-brunneis 50-120 μ long. et 4 μ cr. septatis obsitis, ascis subglobosis v. ovatis, 25-30 \times 20-25, facile diffuentibus, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 1-septatis et constrictis, diu hyalinis, tandem brunneolis, 17-24 \times 8-12, loculis parum inaequalibus.

Hab. in foliis *Gymnosporiae* sp. (Celastraceae), Bandoliez Kop, Zoutpansberg, Transvaal (E. M. DOIBGE).

- 2 *Dimeriella caraçensis* A. Maublanc, Bull. Soc. Myc. de Fr. XXXVI, 4296
1920, p. 34, tab. II, fig. 1-3. — Maculis epiphyllis, rotundatis, 3-8 mm. diam., saepe numerosis confluentibusque, atris fere lanuginosis. Hyphis repentibus, flavidis, plus minusve dense intricatis, flexuosis, saepe varicosis; peritheciis gregariis, nigro-opacis, globosis, 100-140 μ diam., poro pertusis, undique setis ornatis; setis numerosis, rigidis, obscure fuliginis, apice pallidioribus obtusisque, septatis, 4-6 μ crassis, perithecii diametrum superantibus; ascis late cylindricis, breviter attenuato-pedicellatis, sursum rotundatis, apophysatis, 45-65 \times 12-15, 8-sp.; sporidiis distichis, subfusoides v. oblongis, 1-septatis, leniter constrictis, cellula super. saepe paulo crassiori, hyalinis v. dilute fumosis, guttulatis, 14-18 \times 5-5,5.

Hab. in foliis vivis *Baccharidis* sp. (Compositae), Serra do Caraça, Brasilia (Herb. Mus. R. Jan.).

3. *Dimeriella erigeronicola* F. L. Stevens, Trans. Illin. Ac. of Sc., v. 4297
X, 1917, p. 166. — Superficialis, epiphylla, nigra, circulariter disposita 1-4 mm. diam.; mycelio copioso ex hyphis stramineis, sinuosis, 1,5 μ diam. septatis efformato; peritheciis nigris, numerosis, globosis, 64-102 μ diam. appendicibus numerosis (circ. 15), plerumque basilaribus mycelio conformibus obscurioribus 1,5-2 μ cr. sinuosulis septatis praedito; hostiolo minuto sed distincto; ascis cylindraceis, octosporis, obtusis, 31-34 \times 7; sporis bilocularibus hyalinis v. flavidulis, 7 \times 1-5; paraphysibus numerosis, tenuibus, filiformibus, sinuosis.

Hab. in foliis *Erigerontis* *spathulati* (Compositae),

Quebradillas, Mannabo, Yauco, El Gigante, Maricao in Porto Rico, America bor.

4. *Dimeriella clavisata* Doidge, Trans. R. Soc. South Afr. V, 1917, 4298 p. 717 et 742, t. 57, fig. 3. — Epiphylla, maculas effusas efformans; mycelio ex hyphis flexuosis, septatis, fusciculis, 3-5,5 μ crassis composito; peritheciis superficialibus, sparsis v. laxe gregariis, subhemisphaericis, atris, carbonaceis, 90-115 μ diam., praecipue basi v. in parte inferiore 9-15 setulis obsitis, setis septatis clavatis, 15-55 μ long., basi 3,5-7 μ crassis, ad apicem incrassatis, truncatis, diverse lobatis; ascis numerosis, paraphysatis, 8-sporis, sessilibus, cylindraceo-clavatis, apice rotundatis, 40-56 \times 18-20; paraphysibus filiformibus, simplicibus, hyalinis; sporidiis conglobatis v. distichis, hyalinis, 1-septatis, subconstrictis 15-18 \times 5-7.

Hab. in foliis *Vernoniae angulifoliae* (Compositae), Winckle Spruit, Natal (E. M. DOIDGE).

5. *Dimeriella Olyrae* F. L. Stevens, Trans. Illin. Ac. of Sc., v. X, 1917, 4299 p. 167. — Superficialis epiphylla; maculis nullis; mycelio ex hyphis flavidis obscure brunneis, copiosis septatis, sinuosis 3-4 μ circ. cr., maculose aggregatis efformato; peritheciis numerosis, 51-68 μ diam., nigris rugosulis, astomis, setulis 1-4, 234-300 long. nigris, septatis ornatis; ascis ovoideis octosporis, 51-65 \times 24, non paraphysatis; sporidiis inordinate dispositis, 17 \times 7, 1-septatis hyalinis.

Hab. in foliis *Olyrae latifoliae* (Graminaceae), Preston's Ranch, Maricao, Mayaguez, Porto Rico.

LASIOSTEMMA Theiss. et Syd., Ann. Mycol. 15., 1917, p. 218. — Mycelium superficiale, brunneum, septatum, ramosum exhyphopodiatum. Perithecia superficialia globosa apicem versus setulis fasciculatis raro sparsis praedita; apice obtuse papillata astoma; sporidia hyalodidyma. — Typus generis: *Las. melioloides* (Berk. et Rav. in *Dimeriella*) Th. et Syd.

1. *Lasiostemma Merrillii* Syd., Ann. Mycol. 15., 1917, p. 218. — Mycelium hypophyllum, parce evolutum, ex hyphis brevibus 3-3,5 μ crassis formatum, perithecia sparsa vel irregulariter aggregata, superficialia, globosa, 70-110 μ diam., parenchymatice e cellulis 5-7 μ diam. contexta, subopaca, obscure olivaceo-fusca, obtuse papillata, superiore parte praecipue a vertice setulis vel pilis longe radiantibus longis rectis vel subrectis subinde flexuosis flavo-brunneis 180-250 μ longis 3-4 μ crassis remote septatis (articulis 25-50 μ longis) obsita; asci quoad formam variables, mox breves et lati, mox angustiores

sed elongati, $30-45 \approx 16-22 \mu$, aparaphysati, octospori, superne rotundati; sporae oblongae, utrinque rotundatae vel leniter attenuatae medio septatae, non constrictae, hyalinae, $20-25 \approx 4-6$, plerumque distichae.

Hab. in foliis *Radermacherae pinnatae* (Bignoniaceae), Oatubig River, Samar, Ins. Philipp. (M. RAMOS).

2. *Lasiostemma cyathearum* (Syd.) Th. et Syd., Ann. Myc. 15., 1917, 4301 p. 218, *Dimeriella cyathearum* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 478. — Subiculo hypophyllo, superficiali, atro, velutino, crasso, ex hyphis $5-6 \mu$ crassis, obscuris, remote septatis et vix vel parum ramosis composito; peritheciis superficialibus, globosis, astomis, $120-180 \mu$ diam., ubique pilis subrectis vel flexuosis, obscure brunneis, remote septatis, $40-100 \approx 5-6$ obsitis, contextu opaco e cellulis minutis $5-7 \mu$ diam. parenchymatice composito; ascis clavatis, apice rotundatis, subsessilibus copiose paraphysatis, $60-70 \approx 14-16$, octosporis; sporidiis distichis, oblongis, medio 1-septatis, non constrictis, hyalinis, $14-18 \approx 4-5$, cellula superiore paullo latiore.

Hab. in foliis *Oyatheae caudatae* (Cyatheaceae), Luzon, Prov. Laguna, Mt. Maquiling, Philipp. (MERRILL).

ANTENNULARIELLA Woronichin, Les fumaginees du Département de Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 771 (1915). — Absque diagnos.

1. *Antennulariella fuliginosa* Woronichin, l. c., tab. 136, fig. 945-961. — 4302 Mycelio brunneo, praecipue rectangulariter ramoso, crustas fuliginosas, usque $400-500 \mu$ crassas, epiphyllas formante; cellulis hypharum cylindraceutis, vel ad septa leviter constrictis ($7-12-16 \approx 6-8$, guttulatis; pycnidiis globosis vel pyriformibus, contextu parenchymatico, diam. $30-45 \mu$, apice ostiolatis, in hyphis lateraliter vel terminaliter insidentibus; sporis hyalinis, ovalibus, $5 \approx 1,5$; peritheciis globosis, $60-75 \mu$ diam., contextu parenchymatico appendiculis filiformibus, $4-5 \mu$ crassis praeditis; ascis ovalibus, brevissime pedicellatis, $27-30 \approx 11-12$, aparaphysatis (?); sporis oblongo-ovatis, hyalinis, 1-septatis, $10 \approx 3-4$, cellula inferiore longiore.

Hab. in foliis vivis *Ilicis aquifolii* L., Caucasus distr Sotshi Gub. Tshernomorsk, socio *Chaetothyrio colchico* Woronichin.

Sect. 4. *Phaeodidymæ*

ZOPFIA Rabenh. — Syll. I p. 54.

1. *Zopfia Boudieri* Arnaud, Bull. Soc. Mycol. Fr. 1913, p. 255, t. XI f. 4303 A. et B. — Peritheciis sparsis, globosis, magnitudine variis, 0,5-1,25 mm. diam. rugulosis, nigris; ascis clavatis, ad basim vix attenuatis, apice rotundatis, magnitudine variis, plerumque 1-5 sporis; sporidiis magnis, plerumque medio septatis, constrictis, 40-52 × 25-32, vel rarius continuis (35-32 μ diam.) utrinque perfecte rotundatis, tuberculosus, atro-fuscis.

Hab. ad radices *Ligustri vulgaris*, Montpellier, Gallia meridionalis.

WINTEROMYCES Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII p. 37 (1912). — Etym. a cl. mycologo G. WINTER. — Perithecia superficialia, astoma, setulosa, subiculo destituta. Asci octospori, paraphysati. Sporidia didyma, fusca. — A *Parodiella* peritheciis setulosis ascisque paraphysatis recedit.

1. *Winteromyces caespitosus* (Wint.) Speg., loc. cit., cum icon., *Parodiella caespitosa* Winter, Syll. IX p. 411. — Peritheciis in caespitulos orbiculares parvos, 1-2 mm. diam., dense 4-10 constipatis, e globoso obovatis, 200-250 μ diam., omnino superficialibus, nigris, astomis, pilis flexuosis, atris, 50-100 × 4-6, per aetatem deciduis adpersis, coriaceis; ascis late clavatis, breviter pedicellatis, 65-80 × 18-25, paraphysibus paucis, filiformibus, conspicue longioribus obvallatis; sporidiis subconglobatis, ovoideo-ellipsoideis, medio septatis et vix constrictis, diu hyalinis dein fumosis, postremo fusciculis.

Hab. etiam in foliis vivis *Mikaniae cordifoliae* in silvis prope Bompland, Misiones: Argentina. — Sec. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 133 et p. 466, *Wint. caespitosus* = *Gibbera Mikaniae* (P. H.) Rick et Theiss.

*) **PARODIELLA** Speg. — Syll. I p. 717, IX p. 409, XI p. 260, XIV p. 469, XVI p. 412, 1124, XVII p. 541, XXII p. 41.

1. *Parodiella congregata* P. et H. Syd., Ann. Mycol. X, 1912, p. 37. — 4305 Peritheciis epiphyllis, globosis, minutissimis, 60-100 μ diam., dense

*) De hoc gen. cnfr. THEISSEN ET SYDOW, Ann. Mycol. 14., 1916, p. 125.

confertis et greges minutos rotundatos 1-4 mm. latos Doassansiae ad instar efformantibus, basi lenissime immersis, astomis, minute parenchymatice contextis, atris, contextu sub microscopio primitus olivaceo-coeruleo tandem plus minus brunneo et subopaco; ascis quoad formam et magnitudinem ludentibus, mox ovatis v. subglobosis ca. $30-40 \times 20-30$, mox elongatis saccatis $50-65 \times 15-20$, sessilibus, apice incrassatis, paraphysibus indistinctis, octosporis; sporidiis di-tristichis, v. conglobatis, elongatis, 1-septatis, haud constrictis, olivaceis, $26-30 \times 6-7,5$, cellula superiore plerumque paullo brevior sed latiore.

Hab. in foliis vivis *Limnanthemum Thunbergianum* (Gentianaceae) Belfast Transvaal (E. M. DOIDGE).

2. *Parodiella reticulata* (Ell. et Ev.) Theiss. et Syd., Ann. Mycol. 1917, 4306 p. 130; *Parod. grammodes reticulata* Ell. et Ev. in schedis. — Peritheciis epiphyllis secus costam nervosque folii dense bifariam seriatis, e mntae pressione depressis, atro-nigricantibus, verruculosis, $200-250 \mu$ diam.; ascis breviter stipitatis, clavatis, p. sp. $100-115 \mu$, octosporis; sporidiis distichis, griseo-brunneis, tenui-tunicatis, oblongis, leviter constrictis, utrinque non conico-tenuatis, 26×8 .

Hab. in foliis *Chapmaniae floridanae* (Leguminosae), Eustis Florida, Amer. bor. (NASH).

3. *Parodiella perisporioides* (B. et C.) Speg. — Syll. I p. 717 — var. *microspora* Th. et Syd., Ann. Mycol. 1917, p. 129. — Epiphylla, aequaliter distributa, discreta; peritheciis $200-250 \mu$ diam., minute papillatis, glabris, aetate collebascendo plano-scutellatis; ascis $80-90 \mu$ long., p. sp., saepe tantum 6-sporis; sporidiis $25-27 \times 8-9$, rarius $30-32 \mu$ long.; cetera typ.

Hab. in foliis *Indigoferae flaccidae* (Leguminosae) in Amer. bor. — var. *tasmanica* Th. et Syd., l. c. — Peritheciis densis incrassatis, sectione quam in typo paullo mollioribus et pallidioribus, brunneis, superficie asperulis, $200-250 \mu$ diam.; ascis $100-120 \mu$ p. sp.; sporidiis $27-28 \times 9$, saepe etiam 32μ usque. —

Hab. in foliis *Desmodii tasmanici* (Leguminosae), Victoria Australiae (MUELLER)

4. *Parodiella Griffithii* Th. et Syd., Ann. Mycol. 1917, p. 131. — Epiphylla, folii superficiem incrassans; peritheciis asperulis, $130-160 \mu$ diam.; ascis breviter stipitatis, p. sp. $110-130 \mu$, elongato-clavatis; sporidiis distichis, elongato-fusoides, medio septatis, leviterque constrictis, tenui-tunicatis, laete griseo-brunneis, utrinque sensim leviterque tenuatis, valide biguttatis.

Hab. in foliis *Psoraleae tenuiflorae* (Leguminosae), Montana Billings in Amer. bor. (GRIFFITH). — Peritheciis minutis et sporidiorum notis valde distincta species.

5. *Parodiella Spegazzinii* Th. et Syd., Ann. Mycol. 1917, p. 131. — *Peritheciis* epiphyllis, folii superficiem incrustantibus, asperatis, 160-200 μ diam., facile deciduis, fragilibus, saepe in folii cavitatem hemisphaericam relinquentibus; ascis clavatis, breviter stipitatis, p. sp. 100 \times 16-19, saepe elongatis 155 \times 13 usque; sporidiis distichis, v. (in ascis angustioribus) monostichis, 20-26 \times 10; coetera *P. perisporioidis*. 4309

Hab. in foliis vivis *Rhynchosiae Sennae* (Leguminosae), Bagnado S. José de Flores Argentina (Spegazzini, sub *P. perisporioides*). — var. *Kilimandscharica* Th. et Syd., l. c. — Foliis in epiphyllis omnino nigro-incrustatis, a basi ad apicem; peritheciis 150-200 μ diam.; sporidiis 28-29 \times 9. — In foliis *Crotalariae* sp. (Leguminosae); Kilimandscharo, Afr. orient.

HYPOPLEGMA Theiss. et Sydow, Ann. Mycol. 14., 1916, p. 135. — A 4310

Parodiella differt mycelio membranaceo, superficiale, ex hyphis liberis efformato, in stomatibus radicato, perithecia ferente; ab *Apiosporina* v. Höhn. sporidiis loculis aequalibus praeditis. — Typ. gen. *Parodiopsis viridescens* (Rehm, ut *Parodiella*) Maublanc, et tunc *Hypoplegma viridescens* (Rehm) Th. et Syd. vocandum.

LASIOBOTRYS Kunze. — Syll. I p. 29, IX p. 374.

1. *Lasiobotrys hispanica* Theiss. et Syd., in Theissen, Ann. Mycol. 16., 1918, p. 177. — A *Lasiobotrys Lonicerae* Kze et *L. affinis* Harkn. differt praecipue hypostromate hyalino nec nigro-brunneo. — Sclerotii adpressis epiphyllis 220-250 μ latis, hypostromate innatis emergentibus, intus albis, cellulis 8 \times 6, ambitu indistincto mucoso; peritheciis 60 \times 50, brunnescentibus parum distinctis. Immaturus.

Hab. in foliis *Lonicerae arboreae*, Sierra Nevada, Hispania (PORTA et RIGO).

2. *Lasiobotrys Butleri* Theiss. et Syd. in Theissen, Ann. Mycol. 16., 1918, p. 177. — *Lasiobotrys Lonicerae* Syd. et Butl.; l. c., 1911, p. 384 p. p. — A *Lasiobotrys Lonicerae* Kze et *L. affinis* Harkn. differt praecipue hypostromate hyalino nec nigro-brunneo. — Sclerotii arcte adpressis epiphyllis, superficiem minute granulosa efformantibus, 150-200 μ cr., intus albo-virentibus; cellulis exagonis, 4312

13 μ latis; peritheciis parvis, 50-55 \times 40, parietibus indistinctis praeditis; immaturus.

Hab. in foliis *Lonicerae* sp., Bkowali, Naini-Tal, Indiae or. (E. J. BUTLER).

DIMERIUM Sacc. et Syd. — Syll. XVI, p. 410, XVII p. 537, XXII pag. 38.

1. **Dimerium intermedium** P. et H. Syd., Ann. Mycol. X, 1912, p. 37. — 4313
Peritheciis epiphyllis, in mycelio *Meliolae* quaedam parasiticis, hyphis parvis evolutis, aggregatis, ovatis usque globosis, atris, superne angustatis papilliformiter productis et poro pertusis 90-150 μ diam.; ascis fasciculatis, numerosis, clavato-cylindraceis, 32-38 \times 8-10, sessilibus, octosporis; sporidiis distichis, subfusiformibus 1-septatis, non v. vix constrictis, diu hyalinis, tandem flavo-brunneis, 7-10 \times 3-3,5, loculo supero latiore; paraphysibus ascos paullo superantibus, filiformibus, numerosis; pycnidiis peritheciis similibus, sed minoribus; sporulis ellipsoideis, continuis, hyalinis, 2-guttulatis, 5,5-8 \times 3-4.

Hab. parasiticum in *Meliola* quadam ad folia *Isoglossae Woodii* (Acanthaceae), Amanymtote, Natal (E. M. DOIDGE). —
Dim. myriadeo (Oke.) Theiss. affinis sed differt ascis latioribus, coetere etiam robustior.

2. **Dimerium (Phaeostigme) Ramosii** Syd., Ann. Mycol. 1917, p. 200. — 4314
Mycelium hyphas *Asterinae* dense amplexans, ex hyphis olivaceis vel olivaceo-brunneolis 2-3 μ latis flexuosis dense intricatis ramosis et anastomosantibus septatis compositum; perithecia superficialia, globosa 80-100 μ diam., ostiolo typico carentia, glabra, atro-olivacea, opaca, parenchymatica e cellulis 5-6 μ diam. composita; ascis fasciculatis, paraphysatis, sessiles vel subsessiles, ventricosi, 25-35 \times 13-16; octospori; sporae 2-3-stichae, oblongae vel clavulatae, circa medium septatae, non vel leniter constrictae, intense olivaceo-brunneae, 12-16 \times 3-3,5, loculo supero plerumque brevior sed paullo latiore.

Hab. in mycelio *Asterinae* sp. vetustae, ad folia *Dasy-maschalonis clusiflorae* (Anonaceae), prov. Bataan, Luzon, Philipp. (M. RAMOS). — Gen. *Phaeostigme* Syd., l. c. p. 199, a *Dimerio* paraphysibus praesentibus tantum differt.

3. **Dimerium Stevensi** Ph. Garman, Mycologia v. VII, 1915, p. 337. — 4315
Maculis forma irregularibus, 1 mm. v. ultra diam., peritheciis sphaeroideis, nigris, nitidis, 100 μ diam.; ascis clavatis, 42-50 \times 20-22;

sporidiis leniter chlorinis, quandoque obscurioribus, bilocularibus, 16-20 \times 6-8; paraphysibus copiosis.

Hab. in foliis *Cordia e corymbosae* (Borraginaceae), Quebradillos, « College Grounds », Mayaguez, Maricao, Porto Rico, Amer. Centr.

4. *Dimerium scabrosum* Syd. in Leaflets of Philipp. Bot. V (1912) 4316 p. 1534. — Hypophyllum, plagulas orbiculares 3-8 mm. latas, atras efformans, in mycelio *Asterinae* parasitans; mycelio densissime intertexto, ramosissimo, ex hyphis 3-5 μ crassis, fuscis composito; peritheciis in mycelio superficialibus, globosis, astomis, atris, rugulosis, in sicco collapsis, 130-160 μ diam.; ascis saccatis usque fuscoideo-clavatis, apice leniter incrassatis, sessilibus, 38-45 \times 14-16, octosporis; paraphysibus numerosissimis, filiformibus, ascos superantibus; sporidiis 2-3-stichis, cylindraceutis, utrinque obtusis, medio 1-septatis, saepe leniter constrictis, ex hyalino fusco-brunneis, dense distincteque verrucosis, 15-22 \times 3,5-4,5, localis minute guttulatiss.

Hab. parasiticum in mycelio *Asterinae* ad folia *Canarii polynuri* (Burseraceae), Brooks Point, Palawan, ins. Philipp. — Ob sporidia cylindraceuta et distincte verrucosa statim dignoscenda.

5. *Dimerium pseudoperisporioides* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. of Sci. VIII (1913) p. 254. — Peritheciis in medio macularum epiphyllarum, orbicularium, nigrillarum, 0,5-1 cm. diam. densissimis, versus marginem sparsis, sessilibus, globulosis, nigris, glabris, ad basium hyphas nonnullas brevissimas fusciculas 3-5 μ cr. gerentibus, haud ostiolatis, 100 μ diam.; ascis 5 vel 6, globoso-ovoideis, usque ad 35 μ latis, octosporis, paraphysibus gelatinosis intermixtis; sporidiis oblongis vel subclavatis, utrinque obtusis, medio septatis et constrictis, subfuscis, 10-12 \times 5-6.

Hab. in foliis *Ipomoeae* (Convolvulaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. J. BAKER). — Species reiicienda secundum Sydow, Ann. Myc. 1917, p. 239.

6. *Dimerium Cayaponiae* Ph. Garman, Mycologia v. VII, 1915, p. 335, 4318 tab. CLXXI fig. 5. — Maculis nigris, fuliginosis, epiphyllis, forma irregularibus, usque 3 mm. et ultra diam.; peritheciis nigris, globosis, 0,12 mm. diam.; ascis lineari-clavatis, octosporis, 33,6-36 \times 2,4; sporidiis bilocularibus, obscuris, fumosis, loculo altero angustiori, 7,3-9,6 \times 3,6-5.

Hab. in foliis *Cayaponiae americanae* (Ocurbitaceae), Utuadó Porto Rico, America Centr. — Sec. Ph. Garman, hoc genere spectant etiam *Dothidea grammodes* Berk. et *Sphaeria me-*

lioloides Berk. et Curt.

7. **Dimerium Tayabense** H. S. Yates, The Philipp. Journ. of Sc. Bot. 4319 13., 1918, p. 362. — Mycelio ex hyphis tenuibus ramosis subhyalinis ca. 2 μ cr. composito; peritheciis globosis vel ovoideis, 45-55 μ diam., astomis, membranaceis, obscure brunneis, pseudoparenchymaticis; setis paucis (6-12), brunneis, septatis, ca. 20 μ longis; ascis numerosis, subclavatis, octosporis, 40 \times 12; sporidiis distichis, brunneis, ovoideo-oblongis, 1-septatis, constrictis, loculo superiore latiore, 10-12 \times 2.

Hab. parasiticum in mycelio Asterinae et Meliolae in foliis Momordicae (Cucurbitaceae), Mount Binuang Tayabas Prov., Luzon Ins. Philipp. (RAMOS et EDAÑO).

8. ? **Dimerium japonicum** H. et P. Syd. et Hara in H. et P. Syd., Ann. Mycol. X, 1912, p. 406. — Mycelio in Meliola parasitico, hyphas Meliolae densissime ambiente et rete densissimum efformante, ex hyphis fusciculis saepissime anastomosantibus 3-4 μ cr. vix septatis composito; peritheciis globosis gregariis, atris, ostiolo pertusis, glabris, 80-130 μ diam., contextu peculiari, aegre perspiciente ex cellulis minutissimis composito; ascis clavatis v. cylindraceo-clavatis, obtusis paraphysatis, 35-40 \times 10-12, octosporis; sporidiis distichis, oblongis v. subfusoides aut cylindraceis, utrinque plerumque lenissime attenuatis, sed apicibus obtusis, medio 1-septatis et leniter constrictis, fusco-brunneis, 14-17 \times 4-5; pycnidiis eadem forma et magnitudine ac peritheciis; pycnidiosporis ellipsoideo-oblongis, dilute fuscis, continuis, biguttulatis, 7-9 \times 3-4, utrinque obtusis.

Hab. parasiticum in Meliola quadam ex affinitate M. amphitrichae ad folia Arundinariae Narihizae var. Yashadake (Graminaceae), Tokyo, Japonia (K. ONUMA).

9. **Dimerium Mori** (Y. Endô) Sacc., *Dimerosporium Mori* Y. Endô, Journ. Seric. Ass. Jap. 1917, p. 300 fig. B (p. 288). — Peritheciis majusculis, ellipsoideis, 110-120 μ altis, 130-140 μ latis, exappendiculatis, atro-brunneis; contextu laxè celluloso, cellulis pluri-guttulatis; ascis numerosis, clavatis, tenui-tunicatis, 60-70 \times 12-15, octosporis; sporidiis distichis, oblongis, utrinque acutulis, 7-8 \times 5-7; flavo-brunneis, 1-septatis, loculis guttulas 1-2 refringentes includentibus.

Hab. in foliis Mori albae, socia Meliolae specie, Ueda, Tokida Japoniae.

10. **Dimerium singaporense** Sacc., Notae Mycol. XXIV p. 3 (Bull. R. Orto bot. Napoli 1918). — Coloniis epiphyllis, sparsis v. subgre-

gariis, subcircularibus, 2-3 mm. latis, opace nigricantibus, adpressis ex hyphis subradiantibus, parce ramosis, subcontinuis, 3-4 μ cr., guttulatis, brunneis, hinc inde inflatulis formatis; conidiis saepius pleurogenis, clavatis, 3-septatis non constrictis brunneis, 25-30 \times 4,5-5, longiuscule pedicellatis; peritheciis in centro coloniae paucis, globoso-depressis, 150-200 μ diam., nigris, astomis, nudis; contextu dense celluloso, parum distincto, solidiusculo, fuligineo; ascis fusoides, breviter tenuato-stipitatis, apice obtusulis, paraphysatis (?), 35-40 \times 14, octosporis; sporidiis subtristichis, fusoides, utrinque imprimis apice obtusulis, medio 1-septatis, leviter constrictis, 18-20 \times 4,5, dilute fuligineis, saepe inaequilateris.

Hab. in foliis emortuis *Rhodomyrti tomentosae* (Myrtaceae), Reservoir Woods, Singapore (BAKER). — Affine *D. paulensi* (P. Henn.) Sacc. aliisque sed distingui potest.

11. *Dimerium Solani* P. Henn., Hedw., vol. 48 (1908) p. 5. — Caespitulis epiphyllis, rotundatis, sparsis vel gregarie confluentibus, atris; peritheciis gregariis in hyphis Meliolae parasiticis, globulosis, atris, cellulosis, 60-100 μ diam.; ascis clavatis, obtusis, paraphysatis, octosporis, 40-50 \times 7-10; sporidiis oblique monostichis vel distichis, ovoideis vel ellipsoideis, medio 1-septatis, haud constrictis, fusco-brunneis, 8-11 \times 3-4. 4323

Hab. in foliis *Solani grandiflori* (Solanaceae) ad Meliolam parasiticum, Morro Pellado, S. Paulo, Brasilia.

12. *Dimerium* (Phaeostigma) *Clemensiae* Syd., Ann. Mycol. 15., 1917, p. 200. — In Asterina quadam parasitica; mycelium ex hyphis tenuibus subhyalinis flavidulis vel viridulis 2-3 latis copiosis compositum; perithecia gregaria, globoso-conoidea, 80-140 μ diam., ostiolo typico carentia, parenchymatice e cellulis flavo-brunneis 4,5-7 μ diam. contexta; asci sessiles, clavato-cylindracei, 38-48 \times 12-15, octospori, paraphysati; sporae distichae, oblongae, medio septatae, vix vel leniter constrictae, utrinque rotundatae, in maturitate intense fuscae, 12-15 \times 4,5-6,5, leves. 4324

Hab. parasitica in *Asterina* quadam valde vexata, ad folia *Solani torvi* (Solanaceae), Pauai, Benguet, Ins. Philipp. (MARY STRONG CLEMENS).

13. *Dimerium Wattii* Syd. et Butl., Ann. Mycol. IX, 1911, p. 383, tab. XVII fig. 4-11. — Peritheciis plerumque epiphyllis, in crustis *Asterinae Camelliae* insidentibus et probabiliter in eis parasitice vigentibus, minutis, globosis v. ellipticis, collo leniter prominulo apertis, globosis 50-60 μ diam. v. elliptico et ca. 80 \times 45; 4325

ascis cylindraceo-clavatis, $33 \approx 10$, octosporis, aparaphysatis; sporidiis oblique distichis, 1-septatis et leniter constrictis, brunneis, $7 \approx 3,5$, cellula superiore latiore; pycnidiis simul praesentibus eadem magnitudine ac peritheciis, difformibus, aliis lageniformibus collo distincto praeditis, aliis globosis et pilis rigidis atris opacis continuis acutis circa porum obsitis; pycnidiosporis continuis, oblongis v. ellipsoideis, hyalinis, $4,5-6,5 \approx 2,5-3,5$; conidiis numerosis, falcatis, 3-septatis, $70-90 \approx 25$, cellulis extremis hyalinis, duabus interioribus brunneis (? *Dimerium*).

Hab. parasiticum (ut videtur) in crustis *Asterinae Camelliae* ad folia *Camelliae Theae* (Theaceae), Dunmur Dullung, Sibsagar Distr. Assam, Indiae orient. (G. WATT), Darjeeling (MC RAE).

14. *Dimerium Celtidis* P. Henn., Hedw. vol. 48 (1908) p. 5. — Caespi- 432
tulis hypophyllis, gregariis, rotundato-pulvinatis, atris, crustaceis, 1-3 diam.; peritheciis gregariis, subgloboso-collapsis, cellulosi, atrofusci, pertusis, $90-120 \mu$ diam.; ascis cylindraceo-clavatis, obtusis, octosporis, $40-60 \approx 4-5,5$; sporidiis oblique monostichis vel subdistichis, ovoideis vel ellipsoideis, medio 1-septatis, fusciculis, $5-7 \approx 3$.

Hab. in foliis *Celtidis glycyarpae* (Ulmaceae), Serra da Cantareira, S. Paulo, Brasilia.

15. *Dimerium rizalense* Syd., Ann. Mycol. 15., 1917, p. 198. — Mycelium 433
parce evolutum, ex hyphis tenuibus $2-2,5 \mu$ latis olivaceo-fusciculis compositum; perithecia gregaria, superficialia, globosa, fere astoma, $75-90 \mu$ diam., glabra, parenchymatice e cellulis $6-9 \mu$ diam. obscure olivaceo-brunneis contexta; asci aparaphysati, sessiles, cylindracei vel cylindraceo-saccati, $26-36 \approx 9-11$, octospori; spora distichae, oblongae vel obclavatulae, intense olivaceo-brunneae, medio septatae, leniter constrictae, leves, $11-13,5 \approx 3-4$, cellulis serie aequalibus, serie superiore leniter latiore sed brevior.

Hab. parasiticum in mycelio *Asterinae pusillae*, ad folia *Premnae* sp. (Verbenaceae), prov. Rizal, Luzon, Philipp. (M. RAMOS).

PHAEODIMERIELLA Spegaz. — Syll. XXII p. 37. — *Phaeodimeriella* Theiss., Beih. Bot. Centralbl. 29., Abt. II, 1912, p. 46.

1. *Phaeodimeriella (Chaetostigmella) papillifera* Syd., Ann. Mycol. 15., 432
1917, p. 201. — In *Meliola* quadam parasitica; mycelium ex hyphis tenuibus flavidis vel flavo-viridulis copiose anastomosantibus $2-3 \mu$ latis compositum; perithecia laxae gregaria applanato-globulosa,

100-140 μ diam., ostiolo typico carentia, ad verticem verrucis vel papillis minutis aut elongatis et tunc usque 20 μ longis circumscriptis dispositis irregularibus saepe obscurioribus praedita, brunnea, parenchymatice e cellulis 6-8 μ diam., contexta; asci cylindracei; breviter pedicellati, 42-50 \times 10-12, subinde elongati usque 70 μ longi, octospori; paraphyses copiosae, ascos superantes, 1 μ crassae; sporae distichae, in ascis elongatis monostichae, oblongae, 1-septatae, non constrictae, 12-14 \times 3, diu hyalinae, tandem flavo-viridulae.

Hab. in mycelio *Meliolae* cujusdam ad folia *Ixorae* Cumingii (Rubiaceae), prov. Bataan Luzon. Ins. Philipp. — Gen. *Chaetostigmella* Syd., l. c., p. 199 a *Phaeodimeriella* paraphysibus praesentibus tantum differt.

2. *Phaeodimeriella curviseta* Sydow, Ann. Mycol., 17., 1919, p. 35. — 4329

Perithecia sparsa, superficialia, mycelio fere nullo vel saltem aegre perspicendo, globulosa, 80-130 μ diam., parenchymatice e cellulis fuscis 8-10 μ diam. composita, parte superiore circa ostiolum atypicum indistinctum setis pluribus rigidis plus minus introrsum curvatis continuis apicem versus attenuatis atro-brunneis 20-35 μ longis 3-5 μ latis obsita; asci tenuiter tunicati, fasciculati, plerumque cylindracei subinde inferne leniter ventricosi, sessiles, 38-45 \times 8-10, paraphysati 8-spori; sporae distichae, elongato-ellipsoideae vel saepius oblongae, utrinque obtusae, obscure olivaceo-brunneae, medio septatae et leniter constrictae, leves 10-14 \times 3,5 4,5; pycnidia peritheciis similia, aequae setulosa, sed plerumque paullo minora; conidia oblonga, continua, subhyalina, utrinque minute 1-guttulata, 7-10 \times 2-3.

Hab. parasitica in *Diedickeae* singulari Syd. ad folia *Polyosmae cyaneae* Ehn. (Saxifragaceae), Cabadbaran, M. Urdaneta, prov. Agusan, ins. Mindanao, Philippin. (A. D. E. ELMER).

3. *Phaeodimeriella capensis* Doidge, Trans. R. Soc. South Afr. V. 1917, 4330

p. 719 et 742, t. 58 fig. 8. — Hypophylla v. amphigena, maculas effusas radiantia, atras, 3-5 mm. diam., efficiens; hyphis radiantibus, 6-7 μ crassis hyphopodiis continuis, alternis vel sub-oppositis; ramis oppositis; peritheciis numerosis, atris globulosis, carbonaceis, verruculosis, 146-160 μ diam., setulosis; setis 15-20, attenuatis; ascis numerosis, paraphysatis, ellipticis, octosporis, apice incrassatis, sessilibus, 55-70 \times 12-14; sporidiis sub-distichis, fuscis, 1 septatis, ellipsoideis, ad septum leniter constrictis, 16-18 \times 4-5 pycnidii peritheciis similibus; conidiis ellipsoideis, continuis, circ. 14 \times 3.

Hab. in foliis *Apodytis dimitiae*, Knysna, C. B. S. (P. J. PIENAAE).

WAGERIA F. L. Stevens et N. E. Dalbey, *Mycologia*, 11., 1919, p. 7 (a. Cl. Dr. HAROLD WAGER, anglico). — Mycelium brunneum superficiale hyphopodiatum, perithecium sphaeroideum astomum, typice perisporiaceum; asci octospori, sporidia brunnea bilocularia; perithecium appendicibus vermiformibus praeditum. — A gen. *Dimerium* appendicibus vermiformibus praesentibus a *Phaeodimeriella* et *Acanthostigma* setulis nullis diversum.

- 1 **Wageria portoricensis** F. L. Stevens et N. E. Dalbey, l. c., fig. 11-12. — 4331
Mycelio pallide brunneo superficiale irregulariter ramoso 4 μ cr.; hyphopodiis irregulariter dispositis numerosis, primum subsphaeroideis dein irregularibus 7-10 μ diam.; peritheciis sphaeroideis, parvis 47-55 μ diam., ascis paucis sensim maturantibus; appendicibus vermiformibus 1-3, plerumque 1, contortis, 40-80 \times 7; ascie inordinatis magnitudine variabilibus, 8-sporis; sporidiis bilocularibus, obtusis, brunneis, 21 \times 6-7.

Hab. in *Gonzalagunia spicata*, Jajome Alto, el Alto de la Banderas, Porto Rio, Amer. bor.

GENERA ULTERIUS INQUIRENDA:

PHAEOCRYPTOPUS Naoumoff, Champ. Oural I, in Trav. Bur. mycol. (1915) p. 20 (Etym. *phaeos* obscurus et *Cryptopus* cui affinis). — Mycelium superficialiter effusum, laxum, brunneum, tenue — Perithecia globosa, v. globoso-depressa, irregulariter ostiolata, basi stipitiformi in matricem immersa praedita; contextu parenchymatico, e tenaci submolli. Asci cylindracei paraphysati, octospori. Sporidia 1-septata, fuliginea. — A *Dimerio* videtur differre, imprimis peritheciis basi stipitiformi immersa praeditis, et a *Cryptopode* sporidiis coloratis.

1. **Phaeocryptopus Abietis** Naoumoff, l. c., p. 20 t. I f. 1, a. b. (sed ubi 4332 in tabula ?). — Mycelii hyphis 3 μ cr. brunneis; peritheciis e globoso applanatis 85 μ diam., v. 110 μ lat. et 95-100 μ alt., secum nervum longitrorsum dense seriatis; contextu 14-22 μ cr. e cellulis angulosis, brunneis 10-13 μ diam. efformato; ascis cylindraceis 55-60 \times 9,6-12, pedicellatis, irregulariter mono-v. subdistichis, paraphysatis; paraphysibus filiformibus, simplicibus, hyalinis 70 \times 2,7; sporidiis 14-16 \times 5,5, prope medium septatis, constrictis, fuligineis, primo oblique dein recte distichis, loculis vix aequalibus.

Hab. in foliis adhuc vivis v. languidis *Abietis sibiricae*, Perm, Ural, Russia.

DIMERIOPSIS F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 171 (Etym. a *Dimerium* cui affinis). — Perithecia infra crusta myceliali efformata.

1. *Dimeriopsis arthrostylidicola* F. L. Stevens, l. c., fig. 2. — Mycelium 4333 superficiale nigrum, caules hinc inde incrustante. Mycelio ex hyphis 4-5 μ cr. sinuosis, brunneis dense intertextis margine radiantibus efformato; hyphopodiis nullis; setis crasse tunicatis, numerosis, 312 \times 10; peritheciis 400-450 μ diam. astomis sub mycelio nidulantibus; ascis numerosis clavatis, crasse tunicatis, tunica apice tenuiori, octosporis 100-150 \times 25-30; paraphysibus filiformibus collabescentibus; sporidiis e rectis leniter falcatis, inordinatis, bilocularibus, raro quadrilocularibus, obscure brunneis, ad septa constrictis obtusis, 40-55 \times 12-14.

Hab. in caulibus *Arthrostylidii sarmentosi*, Monte Alegrillo, Porto Rico.

Sect. 5. *Phaeophragmiæ*

HARAEA Sacc. et Syd., Ann. Mycol. XI, 1913, p. 312 (Etym. a cl. K. HARA fungi detectore). — Perithecia superficialia, globulosa, sessilia, membranaceo-subcarbonacea, astoma, epapillata, nigra, setulis parvis, praelongis, rectiusculis, septatis, nigricantibus conspersa; contextu grosse celluloso. Asci tereti oblongi, octospori, paraphysibus inaequalibus mucosis obvallati. Sporidia oblongo-fusoidea, 3-septata, grosse 4-guttata, dein fuliginea. — Videtur quasi *Chaetomidium* phaeophragmium.

1. *Haraea japonica* Sacc. et Syd., l. c., p. 312. — Peritheciis gregariis 4334 globosis, atro-nitidulis, 140 μ diam., setulis 900-1000 \times 9-10, filiformibus, basi subincrassatis, septatis, fuligineis, summo apice non acutis; contextus cellulis globoso-polyhedricis, fuligineis; ascis tereti-oblongis, apice rotundatis, 100-120 \times 30, mucoso-paraphysatis, octosporis, breviter crasseque stipitatis; sporidiis distichis, oblongo-fusoideis, 3-septatis, diu hyalinis, grosse 4-guttatis, 35-40 \times 11-12, demum fuligineis, ad septum medium non v. vix constrictis.

Hab. in culmis tenuioribus *Sasae paniculatae* (Graminaceae, Kawaue-mura in Japonia (K. HARA). — Mycelium repens, breve, subinde fasciculatum, nullo modo melioloideum.

PERISPORIOPSIS F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 170 (Ety. a *Perisporium* cui affinis). — Sporidia primum violacea demum brunnescentia, saepe muriformia; asci primum in parenchymate sparsi demum in cavitate peritheciolorum aggregati. Si gen. hoc validum habendum est, nomen novum **Stevensea** Trotter proponendum, quia jam extat gen. *Perisporiopsis* P. Henn. 1904 (Pseudo-sphaeriaceae).

1. **Perisporiopsis Wrightii** (B. et C.) F. L. Stevens, l. c.

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Huc ducendum est *Perisporium Wrightii* B. et C., Syll. I p. 57. — Cnfr. de hac specie A. Wolf, Ann. Mycol. X, 1912, p. 113, cum icon et tab., quae morbum « black spot » dictum gignit.

PERISPORIUM Fr. — Syll. I p. 55, IX p. 412, XI p. 260, XVII p. 544, XXII p. 44. — Sec. Theissen et Sydow, Ann. Myc. 15., 1917, p. 448, gen. hoc minime servandum quia species typicae initio conditae, v. steriles v. ad greges diversos Fungorum pertinent.

1. **Perisporium Bromeliae** F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 168. — Maculis hypophyllis fumosis, 1-2 cm. diam.; mycelio superficiali, copioso, brunneo-nigro, ex hyphis septatis sparse ramosis efformato; peritheciis irregularibus; globosis, 110-120 μ , astomis; ascis ovatis e basi perithecii fasciculatis, numerosis, tetrasporis, paraphysatis, 50-58 \times 20; sporidiis fusoides, stramineis, irregularibus continuis v. 1-3 septatis, ad septa non constrictis 30 \times 8-10.

Hab. in foliis *Bromeliae pinguis* (Bromeliaceae), in Porto Rico pluribus locis.

2. **Perisporium Meliolae** F. L. Stevens, Botan. Gazette, 65., 1918, p. 228, 4337 fig. 2. — Mycelio parco, inconspicuo, in mycelio *Meliolae* parasitico. Peritheciis in coloniis *Meliolae* centro aggregatis, lenticularibus, magis altis quam latis, 230-280 μ latis, 312 μ altis, superficie breviter denseque tuberculata; ascis numerosis, fasciculatis, 8-sporis, cylindraceis; paraphysibus nullis; sporidiis 31-44 \times 7-14, brunneis, plerumque 3-septatis, apicibus inaequalibus uno conoideo altero plus minus rotundato, ad septa praecipue medio constrictis, tunica 2-3 μ cr. extus parum gelatinosa.

Hab. in *Meliola Compositarum* var. *portoricensis* Stev. in *Eupatorio portoricense* (Compositae), Dos Bocas prope Utuado et San Sebastian, Porto Rico. — Habitus peritheciolorum sporidiorumque cum *Meliola* valde affinis.

3. **Perisporium portoricense** F. L. Stevens, Trans., Illin. Ac. of Sc. v. 4338

X, 1917, p. 169, fig. 1. — Obscure brunneum, orbiculare sparsum amphigenum, 0,5-1 mm. diam., coalescens; mycelio copioso diffuso obscuro levi, ex hyphis ramosis 7-9 μ cr. et angulum rect. inter se efformantibus; hyphopodiis nullis; peritheciis numerosis globulosis, nigris, gregariis, carbonaceis, appendicibus ostioliis paraphysibus destitutis, superficie rugosula praed., 175-270 μ diam.; ascis cylindraceis octosporis oblongis, obtusis stipitatis, 92-125 \times 37-50; sporis curvulis, apice obtusis, basi parum attenuatis, 3-septatis articulis secedentibus, 70-80 \times 8-9.

Hab. in foliis *Calophylli Calabae* (Guttiferae), Mayaguez Mesa, Porto Rico.

4. **Perisporium truncatum** F. L. Stevens, Trans. Illin. Ac. of Sc., v. X, 4339 1917, p. 167. — Hypophyllum plagulas fumosas 1-2 cm. diam. efformans; mycelio copioso superficiali brunneo, uniformi, ex hyphis 7 μ cr. septatis ramosis et ramis saepe angulum rectum efformantibus; hyphopodiis nullis; setulis mycelialibus erectis simplicibus, rectis, septatis 310 \times 3,5, basi 8 μ cr.; peritheciis sphaeroideis astomis, rugosulis, 109-202 μ cr., carbonaceis, cellulis circ. 17 μ diam.; ascis e ovoideis cylindraceis, 125 \times 34 tenuiter tunicatis; sporis biseptatis, cylindraceis, 68-92 \times 10, juventute hyalinis, vetustate fumosis v. obscuris, uno apice rotundatis, altero truncato anulatis.

Hab. in foliis *Inga e laurinae* (Leguminosae), Maricao Mayaguez, El Alto la Bandera, Coamo, Ing. verae, Maricao, Porto Rico, Amer. bor.

5. **Perisporium Paullinae** F. L. Stevens, Botan. Gazette, 65., 1918, 4340 p. 228. fig. 1. — Mycelio inconspicuo; peritheciis paucis in coloniis vetustis *Meliolae* nidulantibus; ascis e basi perithecorum fasciculatis, 100 \times 25, clavatis octosporis; sporidiis inordinatis, e clavato-fusoideis parum irregulariter cylindraceis, 5-septatis, 44 \times 10, utrimque rotundato-obtusis, obscure fumosis, cellulis duobus mediis plerumque crassioribus.

Hab. in *Meliola Hessii* Stev., in *Paullinia pinnata* (Sapindaceae), Mayaguez, Porto Rico. — Habitus perithecorum sporidiorumque cum *Meliola* valde affinis.

6. **Perisporium Lantanae** P. Henn., Hedw. vol. 48 (1908) p. 5. — Peritheciis hypophyllis, gregariis, in villo nidulantibus, globulosis, atris, cellulosis, 140-180 μ diam., hyphis fasciculatis repentibus, simplicibus vel ramosis, 3-7 μ crassis circumdatis; ascis oblongo-ovoides v. clavatis, apice rotundatis, octosporis, 60-80 \times 18-20; sporidiis distichis vel conglobatis, fusoideis v. clavatis, curvulis, utrinque

obtuse rotundatis, medio 1-septatis, constrictis, dein 3-septatis olivaceo-fumosis, 23-32 \times 6-10.

Hab. in foliis *Lantanae* sp. (Verbenaceae), S. Paulo, Capital, Cheara, Brasilia.

PERISPORINA P. Henn. — Syll. XVII p. 545.

1. *Perisporina Lantanae* F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 4342 1917, p. 170. — Hypophylla copiose feltrata. Mycelio e. obscure stramineo nigrescenti, ex hyphis crebre septatis 4 μ circ. cr. hyphopodiis destitutis praedito; peritheciis maturis 110-130 μ diam., globosis astomis, junioribus areolatim radiantibus cinctis, dense setulosis, 70-480 \times 7, septatis obscuris, parietibus perithecii dense reticulatis; ascis 61-68 \times 17-20, octosporis, paraphysibus hyalinis filamentosis, ramosis obvallatis; sporidiis inordinatis 2-3 septatis, obscuris, 34-37 \times 7, cellulis duobus majoribus.

Hab. in foliis *Lantanae camarae* (Verbenaceae), Larres, Amer. bor.

*) **MELIOLA** Fr. — Syll. I p. 60, IX p. 413, XI p. 260, XIV p. 470, XVI p. 413, XVII p. 546, XXII p. 45.

1. *Meliola irregularis* Stevens, Mel. Porto Rico in Illin. Biologic. Monogr. II 1916, p. 483, fig. 6. — Coloniis amphigenis, irregularibus, 1-3 mm. diam., nigris; mycelio dense reticulato, irregulariter ramoso, 7 μ diam.; hyphis saepe densissimis et contextum formantibus; hyphopodiis capitatis alternis v. irregularibus, crebris, cellula capitata subpiriformi, 17 \times 10, basilari 3-7 μ longa; hyphopodiis mucronatis alternis v. oppositis, ampulliformibus, angustis, 20 μ long.; setis mycelialibus et perithecialibus nullis; peritheciis 200 μ diam., verrucis conicis 17 μ altis asperis; ascis bisporis; sporidiis 4-septatis, constrictis, brunneis, obtusis, 41 \times 14, saepe irregularibus, uno apice acutis, cellula una v. pluribus crassioribus, septisque subinde obliquis v. numero vario.

Hab. in foliis *Hypophyllae brasiliensis* (Acanthaceae), Porto Rico. — Species peritheciis *M. glabrae* affinis.

2. *Meliola hamata* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 548. — 4344 Amphigena, plerumque epiphylla, plagulas pelliculosas orbiculares

*) De affinitatibus cum Microthyriaceis cnfr. F. v. HÖHNEL, in Ber. d. deutsch. bot. Ges. Bd. 36., 1918, p. 471.

v. irregulares 3-10 mm. latas nigras tenues parce velutinas formans; mycelio bene radiante, ex hyphis longis dense intertextis obscure fuscis 7-9 μ cr. ramosis et anastomosantibus composito; hyphopodiis capitatis numerosis, alternantibus, 22-27 \times 10-12, elongato-piriformibus, cellula superiore rotundata, inferiore minuta; hyphopodiis mucronatis rarioribus, 22-28 μ long.; setis mycelicis, numerosis, atris, tota longitudine opacis, semper ad apicem uncinatis, acutis, rarius obtusis, 350-450 \times 9-12; peritheciis parvis, sparsis, globulosis, atris, verrucosis, astomis, 200-250 μ diam.; ascis non visis; sporidiis oblongo-cylindraceutis, 4-septatis, constrictis, utrinque late rotundatis, obscure castaneo-brunneis, 45-50 \times 17-19.

Hab. in foliis *Buchananiae arborescentis* (Anacardiaceae), Angat prov. Bulacan, et in prov. Rizal Ins. Philippin. (M. RAMOS). — *Mel. Balansae* Gaill. proxima a qua differt sporidiis minoribus et hyphopodiis mucronatis.

3. *Meliola Comocladiæ* Stev., *Mel.* Porto Rico, in Ill. Biol. Monogr. 4345 II, 1916, p. 493, fig. 22. — Coloniae amphigenis, superne copiosioribus, punctiformibus, 1-3 mm. diam.; mycelio reticulato ex hyphis 8 μ diam. plerumque opposit-ramosis; hyphopodiis capitatis alternis, non crebris, 17-20 μ inter se distantibus, cellula capitata piriformi, angulosa et saepe incurva, 20 \times 14, basilari 3-5 μ ; hyphopodiis mucronatis alternis vel oppositis, ampulliformibus; setis mycelialibus nullis, perithecialibus plus minusve copiosis, rectis, apice plerumque uncinato vel contorto, 115 \times 8, ubique fuscis; peritheciis 100-150 μ diam., scabris, areola myceliali radiante cinctis; ascis mox evanidis, tetrasporis; sporidiis 4-septatis, pallide brunneis, lenissime constrictis, cylindraceutis, obtusis, 41 \times 17.

Hab. in foliis *Comocladiae glabrae* (Anacardiaceae), nec nou *Spondias Mombin* (Anacardiaceae), Porto Rico. — Affinis *M. tortuosae*, a qua tamen differt characteribus mycelii.

4. *Meliola opaca* Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1924. — 4346 Amphigena, maculas atras velutinas 2-3 mm. latas formans; mycelio ex hyphis longiusculis dense intertextis ramosis fuscis 6-8 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, oblongo-ovatis, apice obtusis, rectis vel curvatis, bicellularibus, 17-24 \times 8-10; hyphopodiis mucronatis raris, ampulliformibus; oppositis, 20-27 μ longis; setis mycelicis numerosissimis, rectis, erectis, rigidis usque ad apicem opacis, subatris, 300-420 \times 9-11, apice 2-4-furcatis, dentibus usque ad 16 μ longis; peritheciis aggregatis, globosis, rugulosis, atris, 100-160 μ diam., omnino inter setas abscon-

ditis; ascis ovatis 2-3-sporis; sporidiis oblongis, utrinque late rotundatis, 4 septatis, ad septa constrictis, fuscis, 30-42 \times 13-15.

Hab. in foliis *Dracontomeli* Dao (Anacardiaceæ), Cabadbaran, Mindanao, ins. Philipp.

5. *Meliola geniculata* Syd. et Butl., Ann. Mycol. IX, 1911, p. 381 — 4347

Mycelio hypophyllo haud maculiformi, tenuissimo, atro, irregulariter effuso, saepe nervos primarios sequente, margine radiante, ex hyphis fuscis septatis 5-6 μ cr. composito; hyphopodiis capitatis alternantibus, 13-16 μ long., cellula basali minuta, superiore clavata; hyphopodiis acuminatis plerumque oppositis, deorsum leniter incrassatis, superne attenuatis et saepe curvatis, usque ad 18 μ long.; setis mycelicis sparsis, saepe etiam perithecia circulo laxe circumdantibus, 200-275 μ long. 5-8 μ cr., prope basim abrupte geniculatis, ad apicem bis usque quinquies incisus quasi denticulatis (dentibus brevibus obtusisque), opacis; setis perithecialibus nullis; peritheciis sparsis, paucis, globosis, grosse tuberculatis, atris, 130-170 μ diam.; ascis ovatis, brevissime stipitatis bisporis; sporidiis oblongis v. oblongo-cylindricis, 4-septatis, ad septa constrictis, utrinque rotundatis, fuscis v. sordide brunneis, 35-37,5 \times 12,5-15,5.

Hab. in foliis *Odinæ Wodieri* (Anacardiaceæ), Pullianur Travancore, Indiae or. — *Mel. Anacardii* A. Zimmer. proxima. (E. J. BUTLER).

6. *Meliola Uvariae* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. of 4348

Sci. VIII (1913) p. 251. — *Mycelio* in epiphylo haud mutato plagas orbiculares 0,5-2 cm. latas formante, in ambitu fuscidas, in centro floccose nigras; hyphis mycelii primariis plurimis, rectis, septatis, vix ramosis, dilute fuscidulis, 3-4 μ latis, centrifuge repentibus, itemque hyphis mycelii propriis, arachnoideo-centrifuge extensis, subramosis, septatis, fuscis, circ. 8 μ latis, ambitum plagae tene-rum fuscidulum reddentibus; hyphopodiis capitatis plurimis, plerumque monostichis, 2-cellularibus, clavatis, usque ad 20 μ altis, cellula superiore 15-20 μ lata; hyphopodiis uncinatis nullis conspicuis; peritheciis versus centrum plagae sparsis, globulosis, atris, glabris, poro hand pertusis, 250 μ ca. diam.; setis plurimis circa perithecium in mycelio coacervatis, erectis, interdum subcurvatis et verruculosis, septatis, fuscis, apice obtuso dilutioribus, usque ad 350 μ altis, 7-10 μ latis; ascis ovato-clavatis, octosporis, apapophysatis, usque ad 100 \times 25-30; sporidiis distichis, oblongis, rectis, utrinque rotundatis, 3-septatis, medio interdum subconstrictis, de-

mum fuscis, $40 \times 10-12$. — Adsunt conidia plurima ad hyphas mycelii adnata, interdum hyphopodio opposita, fusiformia, 4-septata, in stipitem hyalinum tenuem elongata, subfusca, usque ad $50 \times 9-10$.

Hab. in foliis *Uvariae* (Anonaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Affinis *M. insigni* Grall. sed notis plurimis distincta.

7. *Meliola Tabernemontanae* Speg., Mycet. Argent. VI, Anal. Mus. 4349 Nac. Buenos Aires XXIII p. 45 (1912). — Caespitulis epiphyllis, vel laxe gregariis, repando-diformibus, 2-8 mm. latis, aterrimis, eximie velutinis, subiculo submembranaceo; hyphis densissime intertextis, 10μ cr., rectis vel undulatis, saepius oppositè ramosis; hyphopodiis antrorsis, adpressis, alternis vel oppositis, saepius obovatis, 20×10 , levibus, non lobulatis; setulis confertiusculis, rectis, $200-300 \times 6-8$, opacis, apice obtusissimis, pellucidis, rotundatis vel truncatis; peritheciis globosis, $150-200 \mu$ diam., glabris, atris, grosse verrucosis, non collabescentibus, contextu grosse parenchymatico; ascis ellipsoideis, 2-3-sporis, mox diffluentibus; sporidiis cylindraceis, obtusissimis, 4-septatis, leniter constrictis, subopace fuliginosis, e latere leniter compressis, $35-42 \times 15-16 \times 12-14$, loculis saepius grosse 2-guttulatis.

Hab. in foliis vivis *Tabernemontanae* histicis in silvis prope Bompland, Misiones: Argentina. — Var. *Forsteroniae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 518. — A typo differt setis usque ad 700μ longis, apice acuto attenuatis, hyphopodiis capitatis latioribus et magis angulosis. — *Hab.* in foliis *Forsteroniae corymbosae* (Apocynaceae), Uaetnado, Porto Rico.

8. *Meliola Funtumiae* Beeli, Bull. Jard. Bot. Etat. Bruxelles, v. 7., 4350 1920, p. 95. — Amphigena sed plerumque epiphylla, maculas orbiculares atras confluentes 2-6 mm. diam. efformans; mycelio bene evoluto, hyphis rectis, ramis oppositis, brunneis $12-40 \times 7-8$; hyphopodiis numerosis capitatis, alternis $12-14 \times 10$, cellula superiori subglobosa v. ovata, basilari brevi $4-6 \times 8$; hyphopodiis maculatis paucis, plerumque solitariis elongato-acuminatis; setis mycelicis numerosis, sub peritheciis locatis, atris, septatis, simplicibus, rectis, ad apicem attenuatis $400-500 \times 10-12$; peritheciis verrucosis, brunneis $100-140 \mu$ diam.; ascis non visis; sporidiis 4-septatis ad septa constrictulis, utrimque obtusis, brunneis, cellulis terminalibus obtusis majoribus, $45-50 \times 19-20$.

Hab. in foliis *Funtumiae* sp. (Apocynaceae), Kwango Congo

Africae trop. (VANDERYST). — *M. laevigatae* Syd. proxima sed differt sporarum et setarum mycelii statura.

9. *Meliola laevigata* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1537. — 4351

Mycelio hypophyllo, plagulas discoidales 3-10 mm. latas atras efformante, ex hyphis longiusculis, remotiuscule ramosis, fuscis, 5-7 μ crassis composito; hyphopodiis mucronatis oppositis, sat numerosis, 15-20 μ longis; hyphopodiis capitatis clavatis, rectis vel leniter curvulis, saepe leniter lobatis aut angustatis, 2-cellularibus, 20-25 \times 8-13; setis mycelicis rectis, erectis, simplicibus, opacis, apice acutis, 350-700 \times 7-10; peritheciis in mycelio sparsis, globosis, in sicco collapsis, atris, levibus, haud rugosis, 130-156 μ diam.; ascis ovatis, 40-60 \times 25-45, bisporis; sporidiis oblongis, utrinque late rotundatis, 4-septatis ad septa constrictis, obscure brunneis, 40-44 \times 16-20.

Hab. in foliis *Paralstoniaeclusiaceae* (Apocynaceae), Puerto Princessa, Palawan, ins. Philipp.

10. *Meliola Strophanthi* Doidge, Trans. R. Soc. South. Afr. V, 1917, 4352

p. 729 et 745, t. 62 fig. 23. — Amphigena, plerumque, hyphophylla, subcrustacea; maculas minutas, atras, orbiculares, 1-2 mm. diam., efficiens: mycelio peritheciigero ex hyphis flexuosis, 6-9 μ crassis, e cellulis ea. 18 μ longis compositis, brunneis, ramis oppositis; hyphopodiis capitatis alternis, breviter stipitatis, 20-25 μ long., cellula superiore cylindrica, recta v. leniter curvata, convexa, 16-18 \times 7-9; hyphopodiis mucronatis paucis, ampullaceis, ea. 18 μ long.; setis mycelicis nullis, peritheciis paucis, congregatis, atris, globosis 215-250 μ diam., verrucosis; ascis maturis non visis; sporidiis 4-septatis, cylindricis, ad septa vix constrictis, utrinque rotundatis, 40-45 \times 15-18, mycelio conidiifero inter mycelio peritheciigero intertextis, pallidiore tenuiore; conidiophoris numerosis, erectis septatis, brunneis, 180-200 μ long.; conidiis fusiformibus 3-septatis, 18-32 \times 5-9.

Hab. in foliis *Strophanthi speciosi* (Apocynaceae), Woodbush Zoutpansberg Dist. (E. M. DOIDGE).

11. *Meliola Trachelospermi* H. S. Yates, The Philipp. Journ. of Sc., 4353

Bot. 13., 1918, p. 370 (corr. *trachelospermae*). — Maculas hypophyllas, atras, subpelliculosas, orbiculares 2-5 mm. diam., vel confluentes efformans mycelio abundante ex hyphis brunneis 7-9 μ crassis formato, ramis oppositis; hyphopodiis capitatis numerosissimis, alternantibus, cellula superiore ovata, 13-16 \times 10, cellula inferiore 5-10 μ longa; hyphopodiis mucronatis numerosis, plerumque alternantibus, usque ad 18 μ longis; setis mycelicis paucis, rectis,

erectis, acutis, atris, opacis, 300-400 μ longis, ad basim 8 μ cr.; peritheciis globosis, atris, opacis 180-200 μ diam.; sporidiis 4-septatis, elongatis, utrinque late rotundatis, ad septa constrictis, brunneis, 35-40 \times 16-20.

Hab. in foliis *Trachelospermi* (Apocynaceæ), Mount Lulumutan, Prov. Rizal Luzon Ins., Philipp. (RAMOS et EDAÑO).

12. *Meliola depressula* Syd., Ann. Mycol. 15., 1917, p. 186. — *Amphigena*, 4354
 plagulas orbiculares 2-3 mm. diam., atras convexas in aversa folii pagina maculam depressam efficientes velutinas formans; mycelium parce evolutum, ex hyphis brevibus dense ramosis copiose septatis obscure brunneis 6-8 μ latis compositum; hyphopodia capitata alternantia, 12-15 μ longa, cellula superiore 9-11 μ lata late rotundata semper integra subglobosa vel ovata, cellula inferiore brevissima saepe vix conspicua, hyphopodia mucronata rara; setae myceliales circa perithecia densissime stipatae, copiosissimae, 170-230 μ longae, 6-8 μ latae, ad apicem plerumque uncinatae, tota longitudine opacae; perithecia globosa, 150-230 μ diam., glabra, levia; asci facile diffuentes; sporae cylindræae, 4-septatae, non vel vix constrictae, utrinque obtusae, flavo-brunneae vel dilute brunneae, 28-30 \times 10-12.

Hab. in foliis *Urceolae imberbis* (Apocynaceæ), in collibus pr. Paete, Laguna, Ins. Philipp. (O. F. BAKER).

13. *Meliola amphitricha* Fr. — Syll. I p. 63, Add. II, IV. — var. *pungens* Patouillard, Bull. Soc. Mycol. de Fr., XXXIV, 1918, p. 89. — 4355
 A typo recedit hyphis setuliformibus curvato-flexuosis nec rigidis, apice distincte acutis nec obtusis.

Hab. in foliis *Vineae* et *Pittospori* (Apocynaceæ), in Ins. Madagascar (VIGUIER).

14. *Meliola Wrightiae* H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 4356
 1918, p. 371. — *Amphigena*, plerumque epiphylla et totam folii superficiem (plus minus continua aterrima) obducens; maculae orbiculares 3-6 mm. diam.; mycelio ex hyphis densissime intertextis brunneis septatis anastomosantibus composito; ramis alternantibus vel oppositis; hyphopodiis capitatis numerosis, plerumque alternantibus, subglobosis vel ovatis, 12 μ longis 10-12 μ latis, cellula inferiore ca. 6 μ longa, hyphopodiis mucronatis paucis, irregularibus vel oppositis, ampulliformibus, usque ad 18 μ longis; setis mycelicis numerosis, erectis, rectis vel leviter curvatis, 200-225 μ longis 6-8 μ latis, saepe ad basim geniculatis, obtusis, obscure brunneis vel versus apicem dilutioribus et fuscis; peritheciis nu-

merosis, globosis 120-150 μ diam., atris, opacis, tuberculatis, in sicco collapsis; ascis ovatis, 30 \times 20 bisporis, mox evanescentibus; sporidiis cylindraceis, utrinque late rotundatis, fuscis, 4-septatis, ad septa leviter constrictis, 27-35 \times 12-16.

Hab. in foliis *Wrightiae laniti* (Apocynaceae), Prov. Rizal (RAMOS), Faal Volcano in Prov. Batangas (MERRILL), Luzon Ins. Philipp.

15. *Meliola maricaensis* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4357 II, 1916, p. 499. — Coloniis hypophyllis, irregularibus, sparsis, 5-15 mm. diam., confluentibus, hyphis atris, 7 μ crassis, irregulariter ramosis, laxe reticulatis; hyphopodiis capitatis alternis vel irregularibus, 30-70 μ inter se distantibus, cellula capitata ovoidea vel piriformi vel etiam obpiriformi, angulosa, irregulari, 17 \times 10, basilaris 5-7 μ longa; hyphopodiis mucronatis alternis vel oppositis, phialiformibus, 16-18 \times 7; setis mycelialibus nullis, perithecialibus paucis, 3-10, rectis vel apice parum curvulis, 100-150 \times 7, fuscis, apice obtusis; peritheciis 170 μ diam., scabris; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, utrinque obtusis, 48 \times 20.

Hab. in foliis *Ilicis nitidae* (Aquifoliaceae), Maricao, Porto Rico. — *M. Cupaniae* affinis, a qua differt structura hyphopodiorum.

16. *Meliola Boerlagiodendriae* H. S. Yates, The Philipp. Journ. of Sc., 4358 Bot. 13., 1918, p. 365. — Maculas amphigenas, atras, primo orbiculares, 5-10 mm. diam., deinde confluentes et magnam partem folium occupantes efformans, mycelio abundante, ex hyphis obscure brunneis et subopacis 7-8 μ diam. composito; hyphopodiis capitatis numerosis, alternantibus unilateralibus vel irregularibus, cellula superiore subglobosa, 12-14 μ diam., cellula inferiore 4-5 μ longa; hyphopodiis mucronatis paucis, usque ad 16 μ longis; setis numerosissimis, erectis, dichotome furcatis, opacis, atris, ad basim 8 μ latis; peritheciis paucis, globosis, atris, opacis, tuberculatis, 150-200 μ diam.; ascis non visis; sporidiis 4-septatis, ad septa constrictis, subcylindraceis, utrinque rotundatis, obscure brunneis, 30-50 \times 12-15.

Hab. ad folia *Boerlagiodendri* (Araliaceae), Mount Binuang Prov. Tayabos Luzon, Ins. Philipp. (RAMOS et EDAÑO).

17. *Meliola Dieffenbachiae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4359 II, 1916, p. 530, fig. 56. — Coloniis amphigenis sed in epiphylo typice paullo copiosioribus, in hypophyllo contra latioribus, 1-5 mm. diam., atris, velutinis; mycelio dense intricato-contexto, ramis sae-

pius oppositis; hyphopodiis capitatis alternis vel oppositis, oblongis, sphaerioideis vel curvis, cellula basilari $4\ \mu$, capitata, $10-14\ \mu$ longa; hyphopodiis mucronatis paucis alternis vel oppositis; setis mycelialibus rigidis, atris, rectis, $400\ \mu$ circ. longis, apice breviter ramosis vel tantum denticulatis, dentibus forma et magnitudine variis; setis vel appendicibus perithecialibus nullis; peritheciis in centro coloniae gregariis, copiosis, $140-170\ \mu$ diam.; ascis mox evanidis, 2-4-sporis; sporidiis cylindraceis, 40×14 , utrinque obtusis, 4-septatis, ad septa leniter constrictis, cellulis terminalibus paullo latoribus.

Hab. in foliis *Dieffenbachiae* sequines (Araceae), Porto Rico. — Affinis *M. fuscidulae* sed characteribus setarum facile dignoscenda.

18. *Meliola Philodendri* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4360 II, 1916, p. 528, fig. 54. — Coloniis praecipue epiphyllis, circularibus, atris, 1-5 mm. diam., velutinis; mycelio rudi, $8\ \mu$ cr., recto, ramis oppositis, prope coloniae marginem setoso; hyphopodiis capitatis plerumque oppositis, $20-30\ \mu$ inter se distantibus, cellula basilari brevi, $3\ \mu$, cellula capitata ovoidali, non angulata, 14×10 ; hyphopodiis mucronatis paucis, ampulliformibus, alternis vel oppositis, saepe curvis; setis mycelialibus $230-300\ \mu$ longis, basi $9\ \mu$ cr. atris, apice 3-pluries dichotomice furcatis, ramis circ. $120\ \mu$ longis, ultimis acutis; peritheciis $185\ \mu$ circ. diam.; sporidiis cylindraceis, obtusis, 4-septatis, leniter constrictis $48-54 \times 15-20$, interdum vero tenuioribus et magis constrictis, submoniliformibus.

Hab. in foliis *Philodendri Krebsii* (Araceae), Porto Rico. — Species notis variis bene distincta.

19. *Meliola leptidea* P. et H. Syd., Ann. Mycol. X, 1912, p. 38. — Mycelio epiphyllis, plagulas orbiculares 2-4 mm. diam. velutinas subinde confluentes efformante, ex hyphis $8-11\ \mu$ cr. obscure castaneo-brunneis laxè ramosis composito; hyphopodiis capitatis numerosissimis, dense confertis, alternantibus v. saepe oppositis, $18-28\ \mu$ long.; cellula superiore ovata v. globulosa $10-15\ \mu$ cr. obtusa; hyphopodiis mucronatis rarioribus usque $25\ \mu$ long.; peritheciis laxè gregariis, globosis, atris, in sicco leniter collapsis, asperulis, $250-300\ \mu$ diam.; setis mycelicis numerosissimis, $200-300\ \mu$ long. $8-11\ \mu$ crassis, rectis, erectis, rigidis, opacis, superne in ramos duos longos (usque $130\ \mu$ long.) patenter leniter incurvatis divisas, ramis iterum in ramulos duos variae longitudinis $30-80\ \mu$ long. ad apicem bifurcatos divisas; ascis ovatis, $50-60 \times 28-40$, 2-3-sporis; sporidiis

oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, fuscis, 45-55 \times 15-20.

Hab. in foliis *Oussoniae* sp. (Araliaceae), Woodbush, Zoutpansberg Distr., Transvaal (C. E. LEGAT). — Ab affinibus speciebus differt ramificatione setularum diversa.

20. *Meliola Hoyae* Sacc., Notae Myc. XXIII p. 60 (Accad. Ven. Trent. 4362 1917). — Plagulis imprimis epiphyllis, e subcirculari irregularibus, 3-5 mm. latis (saepe in *Gloeosporio* parasiticis), opace nigricantibus; hyphis radiantibus, ramosis, 7-8 μ cr.; hyphopodiis capitatis, 18-19 \times 11-12, uniseptatis, fulvo fuligineis, copiose praeditis; hyphopodiis mucronatis non observatis; peritheciis globulosis, obsolete ostiolatis, 80-90 μ diam.; setis interspersis rarissimis, 300 \times 11-12, aterritis; sporidiis oblongis, utrinque rotundatis constricto-4 septatis, 42-44 \times 14-15, fuligineis.

Hab. in foliis emortuis *Hoyae luzonensis* (Asclepiadaceae), socio *Gloeosporio Hoyae*, Los Baños, Ins. Philipp. — Affinis *Mel. Montagnei* et *M. Uleanae*.

21. *Meliola Telosmae* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 4363 of Sci. VIII (1913) p. 392. — Mycelio plerumque epiphylo, plagas velutinas, atras, orbiculares, 0,5-2 mm. latas, demum plus minusve late confluentes formante; hyphis rectis, sparse acutanguliter ramosis, fuscis, 5-7 μ cr., hyphopodiis capitatis plurimis, elongato-ovoideis, 2-cellularibus, alternantibus vel oppositis, usque ad 18 \times 5-6, hyphopodiis mucronatis plerumque oppositis usque ad 20 \times 6-8 obsessis; setis mycelialibus erectis, ad basim subcurvatis, apice acutatis, fusco-nigris, crebris, usque ad 250 μ longis, 5-7 μ cr.; peritheciis in medio mycelii paucis aggregatis, globulosis, haud rugosis, astomis, atris, ad 150 μ latis; ascis ovatis, 2-4-sporis 40-45 \times 25; sporidiis oblongis, utrinque rotundatis, 4-septatis, haud constrictis, olivaceo-fuscis, 25-30 \times 10-12.

Hab. ad folia *Telosmae procumbentis* (Asclepiadaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — *M. microspora* Pat. et Gaill. affinis; differt setis acutatis et usque ad apicem fusco-brunneis.

22. *Meliola perpusilla* Syd., Enum. Philipp. Fungi II, in Philipp. 4364 Journ. of Sci. VIII (1913) p. 480. — Epiphylla, rarius caulicola, maculas minutissimas 0,4-1 mm. latas atras efformans; mycelio radiante ex hyphis longis, remote ramosis, brunneis; 8-10 μ latis composito; hyphopodiis capitatis tereti-cylindraceis, rectis, erectis, brunneis, 16-24 \times 8,5-10, cellula basali minuta; hyphopodiis mucro-

natis non visis; setis mycelicis simplicibus, rectis vel leniter flexuosis, apice acutis, inferne subopacis, sursum plerumque pellucidis, $200-320 \times 8-10$; peritheciis 1-4 in quaque macula, globosis, atris, in sicco profunde umbilicatis, $100-150 \mu$ diam., contextu parenchymatico e cellulis $8-10 \mu$ diam. composito; ascis ovatis, 2-4-sporis, $30-42 \times 20-30$; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa leniter constrictis, fuscis, $24-28 \times 11-13$.

Hab. in foliis caulibusque vivis *Tylophoræ*, Luzon, Prov. Nueva Vizcaya, ins. Philipp. — Maculis minutissimis, hyphopodiis tereti-cylindricis et sporidiis angustis præcipue distincta. — Var. *congoensis* Beeli, Bull. Jard. Bot. Etat Bruxelles, v. 7., 1920, p. 97. — A typo recedit peritheciis ($150-180 \mu$) et sporidiis ($35-38 \times 13-16$) majoribus, setis mycelicis rarioribus sparsis pellucidis simplicibus rectis septatis ad apicem acutis, hyphopodiis capitatis alternis v. unilateralibus, cellula superiori ovata $15-17 \times 10$.

Hab. in foliis *Asclepiadacearum*, Kikwit Congo, Africae trop. (VANDERYST).

23. *Meliola dentifera* Syd., Ann. Mycol. 14., 1916, p. 78, fig. 3. — Hypo- 4365
phylla, plagulas minutas orbiculares aterrimas subvelutinas haud confluentes, 1-2 mm. diam., formans; mycelio ex hyphis fuscis $6-9 \mu$ crassis dense ramosis composito, rete densissimum formante; hyphopodiis capitatis numerosis, integris, ovatis vel subglobosis, $12-16 \mu$ longis, cellula superiore $10-14 \mu$ lata globulosa vel late ovata, inferiore brevi; hyphopodiis mucronatis oppositis, usque 20μ longis; setis mycelicis numerosissimis, rectis vel subrectis, $150-220 \times 9-11$, atris, opacis, raro superne subpellucidis, ad apicem sive dentibus numerosis sed brevissimis $1-2,5 \mu$ tantum longis coronatis, sive bifidis in ramos breves crassos divisus et ramis his ad apicem dentibus pluribus instructis; peritheciis dense gregariis, globosis, astomis, non tuberculatis, $100-150 \mu$ diam.; ascis ovatis 2-4-sporis; sporidiis breviter cylindræis, 4-septatis, non vel parum constrictis, sordide brunneis, $22-28 \times 11-12$.

Hab. in foliis *Arrabidaeae nicotianifloræ* (Bignoniaceae), Seringal, San Francisco Rio Acre, Brasiliae (E. ULE).

24. *Meliola lanceolato-setosa* H. et P. Sydow, Ann. Mycol. XII, 1914, 4366
p. 197. — Epiphylla, plagulas orbiculares 1-4 mm. latas sparsas atras velutinas crassas efficiens; mycelio ex hyphis fuscis septatis $9-11 \mu$ crassis densissime intertextis composito; hyphopodiis capitatis numerosissimis, alternantibus v. dense aggregatis, $22-28 \mu$ long., cellula superiore globulosa usque ovata $10-14 \mu$ lata; hypho-

podii mucronatis non visis; setis mycelicis copiosissimis, rectis v. subrectis, tota longitudine opacis, atris, 250-350 μ long. 9-12 μ latis, sursum abrupte acuminatis; peritheciis numerosissimis in quoque plagula, globosis, atris, in sicco collapsis, astomis, modice tuberculatis, 150-220 μ diam.; ascis ovatis, 2-sporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, 4-septatis, non v. parum constrictis; sordide brunneis, 42-46 \times 12-16, cellulis subaequalibus.

Hab. in foliis vivis *Markhamiae* sp. (Bignoniaceae), prope Tengen, Africa orient. (GROTE). — *Mel. francavilleanae* Gaill. proxima, sed hyphopodiis et sporis diversa.

25. *Meliola glabroides* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4367 1916, p. 486, fig. 13. — Coloniis amphigenis, plerumque vero epiphyllis, irregulariter circularibus, 1-8 mm. diam.; mycelio atro laxè reticulato, 7 μ diam., ramis ut plurimum oppositis, saepe rectangulariter divaricatis; hyphopodiis capitatis alternis, non crebris, uno pro cellula, cellulis 30 μ circ. longis, cellula capitata ovoidea, interdum angulosa, 17 \times 14, basilari 7 μ longa; hyphopodiis mucronatis paucis, alternis vel oppositis, ampulliformibus, 16-18 \times 6; setis nullis; peritheciis 100-140 μ diam., papillis rotundatis asperatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 41-17.

Hab. in foliis *Piperis*, *Nectandrae*, *Simarubae*, *Sauvagesiae*, *Solani*, etc., Porto Rico. — Var. *Schlegeliae* Stev., l. c. p. 488. — Differt hyphopodiis capitatis magis angularibus et contextu coloniarum paullo densiore. — *Hab.* in foliis *Schlegeliae* sp. (Bignoniaceae), El Alto de la Bandera, Porto Rico.

26. *Meliola Tecomae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4368 1916, p. 521, fig. 48. — Coloniis amphigenis, plerumque epiphyllis, circularibus, 2-5 mm. diam.; mycelio atro dense contexto, hyphis 7 μ cr. ramis plerumque oppositis; hyphopodiis capitatis alternis, haud crebris, uno pro cellula, cellulis 35 μ circ. longis, cellula capitata ovoidea, 17 \times 13, basilari 6-10 μ longa; hyphopodiis mucronatis oppositis, irregulariter conicis, 15-18 \times 6, collo non perfecte distincto; setis perithecialibus nullis, mycelialibus copiosis, apice late uncinato-incurvis, 170 \times 10, ubique fuscis, apice obtusis; peritheciis 70 μ diam., leviter scabris; ascis mox diffuentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 44 \times 17.

Hab. in foliis *Tecomae* spp. (Bignoniaceae), Porto Rico.

27. *Meliola peruviana* Syd., Ann. Mycol. 14., 1916, p. 75. — Hypophylla, 4369

plagulas griseolas vel olivaceas laxas parum perspicuas 1-3 mm. latas formans; mycelio parcissimo, ex hyphis tenuiter tunicatis remote septatis 2-3 μ latis, pallide olivaceis haud hyphopodiatis composito; setis paucis, erectis, rigidis, septatis, 80-150 μ altis, 5-7,5 μ latis; peritheciis numerosis, dense stipatis, breviter pedicellatis, ovato-oblongis vel difformibus, plerumque utrinque attenuatis, 50-70 μ altis, medio 28-35 μ latis, apice obtusis, vix ostiolatis, contextu tenaci membranaceo ex cellulis polygonalibus 8-10 μ diam. pellucidis composito, monascigeris; ascis primitus globosis, dein ovatis vel oblongis, 42-55 \times 18-28, octosporis aparaphysatis; sporidiis distichis, bicellularibus, non vel vix constrictis, utrinque rotundatis, pallide flavo-brunneolis, 16-20 \times 7-8.

Hab. in foliis *Bignoniaceae*, Seringal, Auristella, Rio Acre Peruviae (E. ULE).

28. *Meliola Canarii* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 550. — 4370

Epiphylla, plagulas parum perspicuas indeterminatas 2-10 mm. latas saepe confluentes efformans; mycelio eximie radiante, matrici arete adpresso, ex hyphis rectis centrifugis fuscis septatis, 7-10 μ latis, ramosis composito; hyphopodiis alternantibus, numerosis, cylindraceo-clavatis, 22-32 \times 10-14, cellula basali plerumque brevi, superiore ellipsoidea v. ovato-rotundata, castaneo-brunneis; hyphopodiis mucronatis rarioribus, oppositis, fuscis, usque 22 μ long.; setis mycelicis sat numerosis, opace fuscis, leniter falcato-curvatis, leniter flexuosis v. subrectis, 300-550 μ long., ad basim 8-10 μ latis, sursum sensim attenuatis, ad apicem acutis v. obtuse attenuatis; peritheciis solitariis v. paucis in quaque plagula, globulosis, 130-175 μ diam., haud verruculosus; ascis?; sporidiis oblongis, rectis, utrinque late rotundatis, castaneo-brunneis, 4-septatis, constrictis, 40-45 \times 14-20.

Hab. in foliis *Canarii villosi* (Burseraceae), prov. Nueva Vizcaya Luzon (R. C. Mc GREGOR) et Mt. Maríelos prov. Bataan Luzon, Ins. Philippin. (P. W. GRAFF). — Vix differt species sequens.

29. *Meliola nigro-rufescens* Sacc., Notae Myc. XXIII p. 60 (Accad. 4371

Ven. Trent. 1917). — Plagulis amphigenis sed epiphyllis copiosioribus, nigricantibus, 6-8 mm. diam., interdum confluentibus, subcircularibus; hyphis radiantibus hyphopodiis capitatis et mucronatis typicis praeditis; setis copiosis, acutis, saepius incurvatis, opacissimis, 400-500 \times 6; peritheciis globulosis, 160-200 μ diam., nigricantibus sed contextu grosse celluloso, rufo-fusco, extus colliculoso praeditis; cellulis contextus 10-12 μ diam.; ascis ellipsoi-

deis, 45-50 × 28-30, bisporis; sporidiis constricto-4-septatis, 35-43 × 15-17, fuligineis.

Hab. in foliis *Canarii* sp. (Burseraceae), Los Baños, Ins. Philipp.

30. *Meliola Bosciae* Doidge, Trans. R. Soc. South. Afr. V, 1917, p. 731 et 4372 745, t. 61, p. 26. — Epiphylla, rarius hypophylla, pelliculas tenues, suborbiculares, nigras, 2-3 mm. latas formans, hyphis radiantibus, circa perithecia crebre anastomosantibus, fuscis septatis plerumque curvatis, vermiculatis, 5,5-9 μ crassis; ramis oppositis, v. unilaterialibus; hyphopodiis capitatis alternis v. unilateralibus, rarius oppositis, breviter stipitatis, 14-20 μ long., cellula superiore 10,5-16 μ long., scabra convexa, truncata et sublobata; hyphopodiis mucronatis plerumque prope perithecia, in ramis separatim v. inter hyphopodia-capitata sparsis, oppositis v. unilateralibus, ampullaceis, apice interdum uncinatis, 14-18 μ long., basi ca. 7 μ crassis; setis mycelicis nullis; peritheciis globosis, atris, verrucosis 160-180 μ diam., appendiculis 6-12 sparsis, simplicibus, 70-90 μ long., basi subbulbosis, ca. 6 μ crassis, ad apicem obtusum pellucidum attenuatis, rectis v. infra apicem abrupte curvatis; ascis 2-3-sporis, ovatis, breviter pedicellatis, mox evanescentibus; sporidiis atro-brunneis, 4-septatis constrictis, utrinque rotundatis, 39-47 × 10,5-17,5.

Hab. in foliis *Bosciae Caffrae* (Capparidaceae), Winkle Spruit Natal (E. M. DOIDGE).

31. *Meliola Viburni* Syd., Ann. Mycol. 15., 1917, p. 193. — Epiphylla, 4373 plagulas minutas orbiculares 1-2 mm. diam. formans; mycelium densissimum, radians, ex hyphis septatis copiose ramosis anastomosantibus 9-10 μ crassis irregularibus saepe subtorulosis compositum; hyphopodia capitata numerosa, alternantia, piriformia, recta vel curvata 22-28 μ longa, cellula superiore 14-16 μ lata, inferiore brevi, hyphopodia mucronata non visa; setae typice nullae (vide infra); perithecia pauca in quaque plagula, globosa, 200-260 μ diam., in sicco collapsa, astoma; aterrima; asci 2-4-spori; sporae oblongae, utrinque rotundatae, fuscae, 4-septatae, leniter constrictae, 42-48 × 13-19.

Hab. in foliis *Viburni odoratissimi* (Caprifoliaceae), Benguet, Luzon Ins. Philipp. (H. S. JATES).

32. *Meliola ditricha* (K. et Cke) Doidge, Trans. R. Soc. South Afr. V, 4374 1917, p. 745. t. 60 fig. 20. — Ita vocanda *Asterina ditricha* K. et Cke — Syll. I, p. 50. — Perithecia globosa; sporidia 4-septata, 54 × 25, atro-brunneae.

Hab. in foliis *Celastris* sp. (Celastraceae), Inanda, Natal Afr. (WOOD).

33. *Meliola Gymnosporiae* P. et H. Syd., Ann. Mycol. X, 1912, p. 79. — 4375

Amphigena, plerumque epiphylla, crustacea, superficialis; mycelio ex hyphis dense intertextis 8-9 μ cr. brunneis composito et maculas atras minutulas, 0,5-2 mm. diam., efformante; hyphopodiis numerosissimis capitatis, alternantibus ca. 15 μ long., superne 10 μ cr.; setis nullis; peritheciis aggregatis, globosis, atris, 140-175 μ diam., rugulosis; ascis 2-4-sporis mox evanidis; sporidiis oblongis utrinque rotundatis 4-septatis, leniter constrictis, fuscis, 33-40 \times 11-15.

Hab. in foliis *Gymnosporiae spinosae* (Celastraceae), prope Manila Ins. Philippin., America Centr. (E. D. MERRILL).

34. *Meliola speciosa* Doidge, Trans. R. Soc. South Afr. V, 1917, p. 726 4376

et 744, t. 60 f. 15. — Maculis hypophyllis, rotundatis, atris 1-5 mm. diam., hyphis ramosis demum anastomosantibus, usque ad 11 μ crassis, brunneis, cellulis ca. 18 μ longis compositis; hyphopodiis capitatis numerosis, speciosis, alternis, stipitatis; cellula basali 7-11 \times 5,5-7, prope hyphae angustiora, capitulo latiore quam longiore, 18-21,5 \times 21,5-25, irregulari, 2-4 lobo, quoque lobo leviter bilobato; hyphopodiis mucronatis raris, pallidioribus, tenuibus, arcuatis ca. 25 \times 7; setis nullis; peritheciis aggregatis, atris, 125-265 μ diam., basi appendiculis numerosis, subcylindraceis, basi 18 μ crassis; ascis 2-sporis, evanescentibus; sporidiis ellipsoideis, 3-septatis, leniter constrictis, brunneis, 52-61 \times 21,5-25; conidiophoris erectis, atrofuscis, septatis, ca. 150 μ longis; conidiis fusoides, 4-septatis, fuscis.

Hab. in foliis *Gymnosporiae* sp. (Celastraceae), Woodbush, Zontpansberg Dest. (E. M. DOIDGE). — *M. mameae* affinis.

35. *Meliola Tehoniana* Trotter n. nov. — *Meliola conferta* L. R. Tehon, Bot. 4377

Gazette 67., 1919, p. 502, tab. XVIII fig. 17-19, nec Doidge 1917. — Maculis amphigenis irregulariter circularibus, punctiformibus, 0,5-1 mm. diam.; mycelio brunneo, dense compacto, radiato, ramulis oppositis praedito, hyphis 8 μ cr.; hyphopodiis capitatis oppositis, hiuc inde confertis intricatis, cellulis apicalibus e conoideis sphaeroideis, 18 \times 12, cellula basali 3-6 μ longa; hyphopodiis mucronatis paucis, oppositis plerumque subapicalibus, phialaeformibus 18 μ long.; setis mycelicis nullis, perithecialibus paucis 6-8, apice obtusis, rectis, 80 \times 7; peritheciis rugosis 120-135 μ diam.; ascis bisporis [?] mox evanidis; sporidiis brunneis, 4-septatis, obtusis, septis

constrictis, 40×15 .

Hab. in foliis *Rhacomatis crassopetali* (Celastraceæ), Mona Island, Porto Rico. — *Mel. parthesicolae* Stev. proxima.

36. *Meliola nigra* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, 4378 p. 505. — *Coloniis* aterrimis, setoso-velutinis, amphigenis sed in epiphyllis magis copiosis, circularibus, 1-10 mm. diam., mycelio dense reticulato-contexto, ex hyphis 7μ cr., plerumque opposite ramosis et ramis subrectangularibus divergentibus constituto; hyphopodiis capitatis alternis, non crebris, 17μ circ. inter se distantibus, cellula capitata obovata vel piriformi vel angulata, 14×10 , basilari brevi, hyphopodiis mucronatis oppositis, ampulliformibus, 17μ longis; setis perithecialibus nullis, mycelialibus copiosis, coloniam totam, margine extremo vix excepto, tegentibus, 200-270 \times 7-9, ubique fuscis, curvis, saepe apice recurvis, apice obtusis; peritheciis 150-160 μ diam., leniter scabris; atris bisporis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37-41 \times 14-17.

Hab. in foliis *Lagunculariae racemosae* (Combretaceæ), Guanajibo et Joyuda, Porto Rico.

37. *Meliola Compositarum* Earle — Syll. XXII p. 51. — Var. *portoricensis* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 490. — Differt mycelio valde crassiore, rude, appendicibus latioribus et magis irregularibus quam in typo.

Hab. in foliis *Eupatorii* (Compositae), Porto Rico.

38. *Meliola cyclopode* Stev., Mel. Porto Rico in Ill. Biol. Monogr. II, 1916, p. 484, fig. 9. — *Coloniis* epiphyllis, circularibus, 1-5 mm. diam.; mycelio atro, reticulum laxum efformante, 7μ diam., ramis plerumque oppositis; hyphopodiis capitatis minutis, alternis, non valde crebris, uno pro cellula, cellulis 20-35 μ longis; cellula capitata subglobosa, 14×14 , basilari 3-7 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus, 10-18 \times 6; setis mycelialibus et perithecialibus nullis; peritheciis 135-170 μ diam., verruculis conoideis asperatis; ascis mox fugacibus; sporidiis 4-septatis, brunneis, leviter constrictis, obtusis, 38 \times 14.

Hab. in foliis *Pseudelephantopodi spicati* (Compositae), Vega Baja, Porto Rico.

39. *Meliola peltata* Doidge, Trans. R. Soc. South Afr. V 1917, p. 727, 4381 et 744, t. 61, fig. 18. — Amphigena; maculas atras, rotundatas, pilosas, 3-7 mm. latas, interdum confluentes efficiens; mycelio peritheciigero pseudo-parenchymatico, peltiformi v. flabelliformi, composito ex hyphis fuscis, ramosissimis, crebre septatis, cellulis ca.

5,5-7 \times 11; hyphopodiis capitatis alternis et ramos appressis, subclavatis, stipitatis, 39-50 μ longis, cellula superiore compressa, plerumque tuberculata v. sublobulata, 28-32 μ long.; hyphopodiis mucronatis non visis; setis mycelicis numerosis, simplicibus, 10-11 μ crassis, usque ad 830 μ longis, nigris, opacis, apice acuto; peritheciis paucis, in plagulis sparsis, atris, scabris vel non, ascis non visis; sporidiis 3-septatis, nonnunquam 2-septatis et constrictis, utrinque ca. 50 \times 29; mycelio conidiifero inter mycelio peritheciigero intertextis tenuiore pallidior; conidiophoris brunneis, torulosis, flexuosis, usque ad 500 μ longis; conidiis fusiformibus non septatis. 16-18 \times 10-11.

Hab. in foliis *Podocarpi Thunbergii* (Coniferae), Huysna, Cap. Bonae Sp. (P. I. PIENAAR).

40. *Meliola Podocarpi* Doidge, Trans. R. Soc. South Afr. V, 1917, 4382 p. 725 et 723, t. 59 fig. 14. — Amphigena, plerumque epiphylla, maculas atras tenues, 2-5 mm. diam. efficiens; hyphis rectis v. subsinuosis, 6-7 μ crassis, fuscis; hyphopodiis capitatis alternis, breviter stipitatis, 14-15 μ long., cellula superiore globosa 10-12 \times 10-11; hyphopodiis mucronatis non visis, setis mycelicis nullis; peritheciis sparsis v. subaggregatis, atris, globosis, verrucosis, 200-250 μ diam.; ascis 2-4. sporis; sporidiis 3-septatis, ad septa valde constrictis, leniter curvatis, utrinque attenuatis et rotundatis, 50-56 \times 14-16.

Hab. in foliis *Podocarpi Thunbergii* (Coniferae), Woodbush, Zoutpansberg Dist. (E. M. DOIDGE), *P. elongatae*, Fort Cunningham, Toise River Huysna, C. B. S. (P. I. PIENAAR).

41. *Meliola pitya* Sacc., Notae Myc. Ser. XX, Nuovo Giorn. Bot. it. 4383 23., 1916, p. 185. — Maculis amphigenis, interdum ramulicolis, effusis, continuis, opace nigricantibus, oblongis, 2-3 mm., subinde dimidiam folium occupantibus, margine erosis; mycelio eximie reticulato, adpresso, hyphis filiformibus pinnato-anastomosantibus rufo-fuligineis, septatis, 7-10 μ cr., hyphopodiis obovoides, prope basim 1-septatis, 12-14 \times 12, pinnatim subalterne dispositis, omnibus conformibus; setis nullis; peritheciis initio globosis, 90-100 μ diam., demum collabescendo umbilicato-subcupulatis 150-180 μ diam., opace nigris, contextu parenchymatico, fuligineo; ascis sporidiisque non visis.

Hab. in foliis ramulisque adhuc vegetis *Taxi canadensis* (Coniferae), Caroga, N. Y., Amer. bor. — Cum *Meliolae* species raro in Coniferis sint observatae, praesentem, etsi (causa ignota) ste-

rilem, tamen typicam, Auctor noluit praeterire.

42. **Meliola Connari** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) 4384 p. 364 (*M. Connariae*). — Amphigena, maculas orbiculares vel irregulares 1-2 cm. latas atras velutinas formans, saepe confluentes et magnam partem folii occupantes; mycelio ex hyphis septatis brunneis radiantibus ramosis 8-11 μ latis composito; hyphopodiis capitatis alternantibus vel irregularibus, cellula superiore oblonga 15-20 μ longa, 18-22 μ lata, cellula basali 8-10 μ longa; hyphopodiis mucronatis paucis, alternantibus vel oppositis, ampulliformibus, usque ad 25-30 μ longis; setis mycelicis numerosis, saepe prope basim perithecii, erectis, rectis vel leviter curvatis, 600-700 μ longis, 12-15 μ latis, atris, opacis, simplicibus, acutis vel obtusis; peritheciis numerosis, globosis, atris, tuberculatis, 150-170 μ diam.; ascis oblongo-ovatis, 60-70 μ longis, 35-40 μ latis, 2-4-sporis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, 50-55 μ longis, 20-25 μ latis.

Hab. in foliis *Connari* sp. (Connaraceae), Basiad, pr. Taya-bas Luzon, Ins. Philipp.

43. **Meliola Roureæ** Syd., Ann. Mycol., 15., 1917, p. 191. — Syn. *M. Roureæ* H. S. Yates, Philipp. Journ. of. Sc. 13., 1918, p. 370. — Amphigena, plus minus effusa, mycelium rectangulariter ramosum ex hyphis obscure castaneo-brunneis flexuoso-torulosis septatis 7-9 μ crassis compositum, hyphopodia sat numerosa alternantia irregularia, 20-26 μ alta, cellula superiore 10-14 μ lata, integra, angulata vel recurvata, subinde etiam leniter lobulata, cellula basali multo breviori, hyphopodia mucronata opposita vel unilaterialia, plerumque e basi conoidea apicem versus sensim attenuata, 22-26 μ longa, basi 8-10 μ lata; setae myceliales numerosae simplices, rectiusculae usque subfalcatae, 600-900 μ longae, basi 10-12 μ latae bifformes; aliae tota longitudine opacae, ad apicem acutae, aliae ad apicem non vel vix tenuiores, late rotundatae vel potius truncatae et plus minusve pellucidae; perithecia sparsa, globosa, 150-200 μ diam., glabra; asci 2-spori; sporae oblongo-cylindratae, sordide fuscae, 4-septatae, vix vel leniter constrictae, utrinque rotundatae, 40-44 \times 16-19.

Hab. in foliis *Roureæ erectae* (Connaraceae), Rizal, Luzon, Ins. Philipp. (M. RAMOS).

44. **Meliola ipomoeicola** Beeli, Bull. Jardin Bot. Etat Bruxelles v. 7., 1920, p. 96. — Epiphylla; maculas irregulares atras parvas 0,5-1 mm. efformans; mycelio parce evoluto, hyphis leniter sinuosis brun-

neis 12-15 \times 6-8; hyphopodiis numerosis capitatis, alternis, raro suboppositis v. unilateralibus, cellula apicali subglobosa, 12 μ diam., basilari brevissima v. nulla; hyphopodiis mucronatis oppositis; setis mycelicis numerosis sparsis brunneis septatis rectis et rigidis simplicibus apice acutis, 200-300 \times 6-9; peritheciis verrucosulis, nigris astomis, 100-200 μ diam.; ascis non visis; sporidiis 4-septatis, ad septa constrictulis, obtusis brunneis, 38-40 \times 16.

Hab. epiphylla in foliis *Ipomoeae* sp. (Convolvulaceae), Congo Africae trop. (VANDERYST). — *M. Ipomoeae* Earle (Syll. XVII p. 549) nec Rehm, Ascom. Exsicc. fasc. 55., n. 2104 proxima, differt sporidiis majoribus, setis mycel. acutis, hyphopod. capitatis alternis numerosis, quandoque unicellularibus globulosis.

45. *Meliola quadrifurcata* Rehm, Ascomyc. Philipp. I in Philipp. Journ. 4387 of Sci., 8., (1913) p. 181. — Mycelio in maculis epiphyllis brunneo-flavescentibus haud definitis plagulas velutinas plus minusve orbiculares, vix confluentes, 1,5-3 mm. latas, atras, medio incrassatas, arachnoideo-marginatas efformante; hyphis mycelii centrifugis, plerumque rectis, vix ramosis, fuscis, septatis, 6 μ cr., hyphopodia alternantia, capitata, 2-cellularia gerentibus, ca. 20 μ altis, cellula superiore subglobosa ca. 12 μ lata, hyphopodiis mucronatis haud conspicuis; peritheciis in centro mycelii aggregatis, versus basim verruculosi, atris, glabris, poro non pertusis, usque ad 250 μ diam., juxta basim setis plurimis, erectis, nigro-fuscis, septatis, usque ad 150 μ alt. 9 μ cr., ad apicem in ramos 4, raro 2 vel 3, erectos, plerumque recurvos, obtusos, haud denticulatos, 80-120 \times 5, septatos, dilute fusciculos furcatis; ascis ellipticis, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, fuscis, 35-40 \times 12-14.

Hab. ad folia *Ipomoeae* (Convolvulaceae), Luzon, prov. Laguna, Los Baños, ins. Philipp. (O. F. BACKER). — Setis perithecii 4-furcatis praecipue distincta; *M. furcatae* Gaill. et *M. patenti* Syd. affinis.

46. *Meliola Merremiae* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4388 of Sci. VIII (1913) p. 253. — Mycelio epiphyllis plagulas orbiculares nigras vix radiantes 1-1,5 mm. latas formante, ex hyphis rectis, centrifugis, fuscis, septatis, 7-8 μ latis rectangulariter dichotomis, arcute juxtapositis; hyphopodiis plurimis, rectis, obtusis, 2-cellularibus, cellula inferiore perparvula, in longa serie propinque oppositis, fuscis, 10-12 \times 6; hyphopodiis uncinatis oppositis, mucronatis, fuscis, 15 \times 6; setis mycelialibus rectis, septatis, ad basim usque ad 10 μ latis, apice obtusis, fuscis; peritheciis sparsis,

globulosis, astomis, haud verruculosus, atris, ca. 120 μ diam.; ascis?; sporidiis oblongis, rectis, obtusis, 4-septatis, fuscis, 30-35 \times 10-12.

Hab. in foliis *Merremiae hastatae*, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — A *M. praetervisa* Gaill. differt sporidiis valde minoribus et setis obtusis; a *M. malacotricha* Speg. hyphopodiis alienis.

47. *Meliola Hervittiae* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4389 of Sci. VIII (1913) p. 253. — Mycelio maculas orbiculares epiphyllas, 2-2,5 mm. latas, interdum confluentes, nigras, tenuissimas, margine subarachnoideas formante, ex hyphis sparse ramosis, 6-7 μ cr., fuscis, arcte aggregatis, breviter cellularibus; hyphopodiis capitatis numerosissimis, oppositis, oblongis, 2 cellularibus, breviter stipitatis, cellula superiore obtusa, 15 \times 7; hyphopodiis mucronatis oppositis vel solitariis, ampulliformibus, pallidioribus, usque ad 17 \times 6-10; setis mycelialibus sparsis, erectis, ca. 200 μ longis, ad basim 7 μ latis, apice acutatis, fuscis; peritheciis sparsis, globulosis, astomis, haud verrucosis, nigris, 130 μ circ. diam.; ascis 2-vel 3-sporis; sporidiis cylindratis, utrinque obtusis, rectis, 4-septatis non constrictis, dilute fuligineo-fuscis, 35-37 \times 14.

Hab. in foliis decoloratis *Hervittiae sublobatae* (Convolvulaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Species facile dignoscenda.

48. *Meliola Alangii* Syd., Ann. Mycol., 14., 1916, p. 355. — Amphigena, 4390 plagulas parum visibiles primo minutas 1-2 mm. diam. dein plus minus confluentes tenues arachnoideas formans; mycelio matrici arcte appresso repente, rectangulariter ramoso, ex hyphis 6-8 μ crassis fuscis septatis composito; hyphopodiis capitatis sat numerosis, alternantibus, totis 12-18 μ longis, cellula superiore globulosa vel saepius ovata integra 8-10 μ crassa, inferiore brevior; hyphopodiis mucronatis alternantibus vel oppositis, 18-24 μ longis, in collum longum productis; setis mycelii modice copiosis, rectis vel fere rectis, 300-600 μ longis, ad basim 7-8 μ crassis, sursum attenuatis, sed apicibus obtusis, tota longitudine opacis vel subinde ad apicem parum dilutioribus; peritheciis sparsis globosis, parum tuberculatis, 140-170 μ diam., in sicco collapsis; ascis fugacibus 2-3-sporis; sporidiis cylindratis, 4-septatis, parum vel leniter constrictis, fumoso-brunneis, utrinque obtusis, 25-30 \times 9-11.

Hab. in foliis *Alangii begoniaefolii* (Cornaceae), Los Baños ins. Philippin. (C. F. BAKER).

49. *Meliola Cucurbitacearum* Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4391

nogr. II, p. 526; fig. 51. — Coloniis epiphyllis, circularibus, 1-3 mm. diam., mycelio atro, reticulum sat compactum efformante, 7 μ crasso, ramis plerumque alternis; hyphopodiis capitatis alternis, haud crebris, uno pro cellula, cellulis 17-24 μ longis, cellula capitata ovoidea, lobata, 17 \times 14, basilari 7 μ longa; hyphopodiis mucronatis alternis vel oppositis, phialiformibus, 20 \times 5, rostro tenui, uncinato; setis perithecialibus nullis, mycelialibus in partibus coloniarum vetustis copiosis, 190 \times 9, ubique fuscis, apice simpliciter vel bis dichotomo-ramosis, rectangulariter dispositis, primariis 15-35 μ , secundariis subaequalibus, apice acutis; peritheciis 120 μ diam., scabris; ascis mox evanescentibus; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 41 \times 14.

Hab. in foliis caulibusque *Cayaponiae*? (Cucurbitaceae), El Alto de la Bandera, Porto Rico. — Dichotomia setarum et hyphopodiis lobatis perdistincta.

50. *Meliola malacotricha* Speg., Syll. IX, p. 425 — var. *major* Beeli, 43 Bull. Jard. Bot. État Bruxelles v. 7., 1920, p. 96. — A typo differt sporidiis longioribus, 44 \times 16, setis mycel. etiam majoribus 350-400 \times 8, hyphopodiis capitatis oppositis numerosissimis confertis.

Hab. in foliis *Cucurbitaceae* (?), Wombali Congo, Africa trop. (VANDERYST). — Var. *longisporae* Gaill. affinis et verisimiliter eadem, matrice tantum diversa.

51. *Meliola confragosa* Syd. in Leaflets of Philipp. Bot. V (1912) 43 p. 1536. — Mycelio plagulas minutas tantum epiphyllas, rotundatas vel irregulares, 0,5-2 mm. latas, atras, tennes efformante vel subinde totam folii superficiem plus minusve aequaliter obducente, ex hyphis laxiuscule ramosis, torulosis flexuosisque, fuscis, 6-9 μ cr. composito; hyphopodiis capitato-clavatis, alternis, saepe truncatis vel ad apicem irregularibus, 20-28 μ longis, superne 10-14 μ latis; setis nullis; peritheciis laxiuscule gregariis, globosis, atris, grosse tuberculatis (tuberculis valde prominulis), 100-175 μ diam., opacis; ascis late clavatis, bisporis, 38-50 \times 14-22; sporidiis oblongis, 4-septatis, parum constrictis, utrinque rotundatis, 25-32 \times 9-10, olivaceo-brunneis.

Hab. in foliis vivis *Cucurbitaceae* quaedam, Brooks Point, Palawan, ins. Philipp.

52. *Meliola Mapaniae* H. S. Yates, Philipp. Journ. Sc. Manila, XII 43 (1918) p. 367. — Amphigena, maculas atras, orbiculares, 1-5 mm. diam., saepe confluentes; mycelio ex hyphis brunneis septatis et peritheciis radiantibus 8-12 μ crassis composito; ramis oppositis; hy-

phopodiis capitatis numerosis, alternantibus, cellula superiore globosa vel subglobosa, 15-17 μ diam., cellula inferiore 10-14 μ longa; hyphopodiis mucronatis numerosis plerumque alternantibus, ampulliformibus, usque ad 20-30 μ longis; setis mycelicis numerosis, erectis, rectis, atris, opacis, 500-800 μ longis, 15 μ crassis simplicibus, acutis; ascis non visis; sporidiis oblongis, 4-septatis, ad septa constrictis brunneis, utrinque late rotundatis, 52-56 μ longis, 22-26 μ latis.

Hab. in foliis *Mapaniae* sp. (Cyperaceae), Catubing River Samar, Ins. Philipp.

53. *Meliola intricata* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. 4395

of Sci. VIII (1913) p. 268. — *Amphigena* vel *culmicola*, maculas circulares vel oblongas 2-8 cm. longas, sparsas vel confluentes, atras formans; mycelio ex hylis densissime intertextis et rete fere continuum efformantibus, ramosis, septatis, fuscis, 7-11 μ latis composito; hyphopodiis capitatis numerosissimis, alternantibus, 18-26 μ longis, rectis vel curvatis, cellula superiore 10-14 μ crassa, rotundata vel parum lobato-incisa, inferiore 4-8 μ longa, 5-7 μ lata; setis mycelicis numerosis, rigidis, erectis vel basi abrupte geniculatis, atris, opacis, apice acutiusculis, 500-800 \times 12-17; peritheciis paucis in quaque macula, globosis, 150-200 μ diam., atris, tuberculatis; ascis late ovatis, 2-4-sporis, mox evanescentibus; sporidiis oblongis, 4-septatis, leniter constrictis, utrinque obtusis, fuscis, 32-38 \times 11-12.

Hab. in foliis culmisque *Scirpi grossi* (Cyperaceae), Luzon, Manila, ins. Philipp. (MERRILL). — Rete myceliali hyphopodiis abunde praedita et setis crassis praecipue distincta. — Var. *major* Beeli, Bull. Jard. Bot. État Bruxelles v. 7., 1920, p. 96. — A typo differt sporidiis majoribus 42-46 \times 14-16, setis mycelicis angustioribus 700-800 \times 6-10. — *Hab.* epiphylla in *Monocotyledoneae* sp., Kwiu, Congo Africae trop. (VANDERYST).

54. *Meliola Hopeae* H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 4396

1918, p. 369. — *Hypophylla*, maculas atras, 1-2 cm. diam. orbiculares formans; mycelio laxo radiante ex hyphis brunneis 5-7 μ latis septatis composito; ramis oppositis vel alternantibus; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore ovoidea, 10 μ diam., cellula inferiore 5 μ longa; hyphopodiis mucronatis numerosis, plerumque irregularibus, ampulliformibus, usque ad 15-25 μ longis; setis peritheci et mycelicis circa 6 ad basim perithecii positae, erectae, basi geniculatae 300-400 μ longae,

8 μ latis, septatis, apicis simplicibus, obtusis; peritheciis rotundatis, applanatis, atris, opacis, tuberculatis, 100-140 μ diam.; ascis evanescentibus 2-4-sporis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa non constrictis, brunneis, 35-38 \times 12-14.

Hab. ad folia *Hopeae* sp. (Dipterocarpaceae), Mount Cadig Prov. Tayabas, Luzon, Ins. Philipp. (YATES).

55. *Meliola Yatesiana* Trotter n. nov. — *Meliola Diospyri* H. S. Yates, 4397

Philipp. Journ. of Sc. Manila, XII (1917) p. 364 nec Sydow 1911 (*M. Diospyriæ*). — Amphigena, plerumque epiphylla, maculas atras, velutinas, orbiculares vel irregulares formans; mycelio abundante ex hyphis obscure brunneis 8 μ crassis composito; hyphis matrici adpressis; ramis oppositis vel irregularibus; hyphopodiis capitatis numerosis, oppositis, cellula superiore subglobosa, 12-15 μ lata, cellula inferiore 4-5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis; setis mycelicis numerosis, erectis, rectis, vel leviter curvatis, 500-650 μ longis, 10 μ latis, atris, opacis, simplicibus, acutis; peritheciis paucis in quaque macula, globosis, atris, tuberculatis, 80-120 μ diam., ascis non visis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa leviter constrictis, brunneis, 45-55 μ longis, 20-22 μ latis.

Hab. in foliis *Diospyri discoloris* (Ebenaceae), Basiad, Prov. Tayabas, Luzon Ins. Philipp.

56. *Meliola Diospyri* Syd. in Syd., et Butl., Ann. Mycol. IX, 1911, 4398

p. 381. — Amphigena; mycelio maculas orbiculares 3-5 mm. latas atras formante; hyphis fuscis, 5-8 μ cr., hyphopodia numerosa capitata opposita usque 17 μ longa gerentibus; setis mycelii rectis, rigidis, simplicibus, atro-brunneis, opacis, 350-700 μ long., 9-15 μ cr.; peritheciis globosis, 130-175 μ diam., in sicco collabescentibus; ascis 2-4 sporis; sporidiis 4-septatis, leniter constrictis, fuscis, utrinque rotundatis, 36-41 \times 12-16.

Hab. in foliis *Diospyri montanae* (Ebenaceae), Sidra-bunna, Koppa, Mysore Indiae or. (E. J. BUTLER).

57. *Meliola Elaeocarpi* H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) 4399

p. 365 (*M. Elaeocarpeae*). — Amphigena, plagulas atras, pelliculosas, orbiculares, 1-6 mm. diam., saepe confluentes efformans; mycelio ex hyphis ad basim perithecii centrifugis ramosis oppositis brunneis septatis 6-10 μ latis composito; hyphopodiis capitatis numerosis, oppositis, cellula superiore ovoidea, 10-12 μ diam., cellula basali 5-6 μ longa; hyphopodiis mucronatis paucis, irregularibus vel oppositis, ampulliformibus, 15-18 μ longis 6-8 μ latis; setis mycelicis

erectis, rectis vel ad basim geniculatis simplicibus, 300 μ longis, 10-12 μ latis, atris, opacis, apicem versus brunneis, acutis vel obtusis; peritheciis paucis in quaque macula, subglobosis, obscure brunneis tuberculatis, 100-120 μ diam., ascis evanescentibus; sporidiis 4-septatis, brunneis, ad septa constrictis, utrinque late rotundatis, 55 μ longis 22 μ latis.

Hab. in foliis *Elaeocarpi* (Elaeocarpaceae), Benguet Luzon, Ins. Philipp.

58. *Meliola callosperma* Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. 4400 Cienc. Cordoba, t. 23., 1919, Extr. p. 89. — Maculis nullis; plagulis subicularibus saepius epiphyllis parvis orbicularibus 2-8 mm. diam. suberustaceis glaberrimis atris, hyphis rectiusculis alterne ramosis, 8-10 μ cr., hyphopodiis subglobosis, 10-15 \times 15, sessilibus donatis, apice circa perithecia praecipue ramulis sensim abbreviatis subclavulatis et fere hyphopodiiformibus praeditis; peritheciis depresso globosis, in sicco collabescentibus, glabris, astomis, 150-200 μ diam.; ascis elliptico-clavulatis, breviter pedicellatis, longe tenuiterque paraphysatis, 8-sporis, 100-120 \times 25-30; sporis elongato-subfusoidis, leniter clavulatis transverse 5-septatis, ad septum medium tantum constrictulis, levibus, roseo-fuliginis.

Hab. ad folia viva *Gaylussaciae*? sp. (Ericaceae), prope Apiahy, America austr. (J. PUIGGALI).

59. *Meliola arcibensis* Stev., Mel. Porto Rico, in III. Biol. Monogr. 4401 II, 1916, p. 491, fig. 18. — Coloniis hypophyllis, irregularibus, 1-3 mm. diam.; mycelio reticulum sat densum efformante ex hyphis 6 μ circ. diam., leniter sinuosis, opposita vel alterne ramosis constituto; hyphopodiis capitatis alternis in quaque cellula solitariis, cellulis 10-17 μ longis, cellula capitata ex ovoidea cuneata vel omnino irregulari, 20 \times 10, basilari brevi vel usque ad 20 μ longa; hyphopodiis mucronatis copiosis, plerumque oppositis, ampulliformibus, angustis, 20 μ longis; setis mycelialibus nullis; appendicibus perithecialibus paucis, 4-8, laryiformibus, brevibus, circ. 85 \times 20, curvatis vel sinuosis, pellucidis, apice obscurioribus; peritheciis 200 μ diam., ob papillas rotundatas scabris, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, obscure brunneis, valde constrictis, obtusis, 44-51 \times 20.

Hab. in foliis *Acalyphae bisetosae* (Euphorbiaceae), Dos Bocas prope Utuado, Porto Rico. — *M. Acalyphae* appendicibus chitinosi et structura hyphopodiorum bene distincta.

60. *Meliola Acalyphae* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4402

of Sci. VIII (1913) p. 252. — Mycelio imprimis hypophyllo, plagulas sparsas, nigras, raro confluentes, orbiculares, 0,5-1,5 mm. latas formante, ex hyphis ad basim peritheci centrifugis, rectis, vix ramosis usque ad 10 μ latis, septatis, parvicellularibus, arete agglutinatis, fuscis, apice dichotomis composito; hyphopodiis permultis, oblongis, obtusis, rectis, 2-cellularibus, oppositis, fere juxtapositis, 20 \times 10; hyphopodiis uncinatis fuscis, oppositis, raris, usque ad 20 \times 10; setis nullis; peritheciis in medio mycelii paucis, sessilibus, globulosis, atris haud ostiolatis, ex cellulis magnis, convexule prominentibus contextis, circ. 150 μ diam.; ascis bisporis; sporidiis oblongis, obtusis, rectis, 4-septatis, vix ad septa constrictis, fuscis, 30-35 \times 12-14.

Hab. in foliis *Acalyphae stipulaceae* (Euphorbiaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

61. *Meliola luzonensis* Syd., Ann. Mycol. 15., 1917, p. 188. — Amphigena, 4403
plerumque epiphylla, plagulas orbiculares vel irregulares 3-8 mm. diam. saepe confluentes formans; mycelium ex hyphis radiantibus rectangulariter ramosis obscure-brunneis 7-9 μ crassis septatis compositum; hyphopodia capitata numerosissima, plerumque perfecte opposita, cylindracea semper integra, 15-22 μ longa, 8-10 μ lata; hyphopodia mucronata non visa, setae mycelicae modice copiosae, 600-900 μ longae, basi 10-12 μ latae, apicem versus sensim attenuatae, semper acutae, tota longitudine opacae, atrae, simplices, rectae vel leniter curvatae; perithecia laxè aggregata, globosa, astoma 140-180 μ diam.; asci 2-3 spori; sporae oblongae, utrinque rotundatae, 4-septatae, leniter constrictae, fuscae 32-36 \times 12-15, loculis aequalibus.

Hab. in foliis *Antidesmae* spec. (Euphorbiaceae), prov. Bataan, Luzon, Ins. Philipp. (M. RAMOS). — Affinis *M. oppositae* sed hyphopodia cylindrica.

62. *Meliola Colliguajae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4404
Buenos Aires XXIII p. 40 (1912). — Caespitulis epiphyllis, subdiscoideis, 2-8 mm. diam., non raro confluyendo difformibus, pro parte setulosis, tenuissime fibrilloso-araneosis et siccando plus minusve deciduis; hyphis confertiusculis, intertextis, alterne ramosis, subflexuosis 8-9 μ cr., hyphopodiis alternis arete antrorsum adpressis, rarissime ampulliformibus et oppositis plus minusve laxè ornatis; setulis praecipue circa perithecia evolutis, erectis, 100-400 \times 8-10, leniter flexuosis, atris; peritheciis subglobosis 150-250 μ diam., in sicco collabescentibus, atris, glabris, subcarbonaceis, parce papil-

losis, astomis, contextu opaco indistincto; ascis non visis; sporidiis cylindraceis, utrinque obtusissime rotundatis, quadrisepatis, ad septa leniter constrictis, $38-45 \times 14-18$, obscure fuliginéis, loculis omnibus subæqualibus.

Hab. in foliis vivis *Colliguajae brasiliensis* (Euphorbiaceæ), in silvis prope Puerto León, Misiones: Argentina.

63. *Meliola gymnanthicola* Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4405
nogr. II, 1916, p. 517. — Coloniae epiphyllis, circularibus, 2-4 mm. diam.; mycelio reticulum densum efformante, hyphis 7μ cr. ramis plerumque oppositis saepeque rectangulariter insertis; hyphopodiis capitatis alternis, haud crebris, in quaque cellula singulis, cellulis 20μ circ. longis, cellula capitata ovoidea vel subcylindrica, 17×10 , basilari $2-3 \mu$ longa; hyphopodiis mucronatis alternis vel oppositis e conoideis ampulliformibus, irregularibus, $16-18 \times 7$; setis perithecialibus, nullis, mycelialibus sparsis, leniter undulatis, 300×7 , apice obtusis, atris; peritheciis 190μ diam., scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37×17 .

Hab. in foliis *Gymnanthis lucidae* (Euphorbiaceæ), Guayanilla, Porto Rico.

64. *Meliola Heveae* Vincens in Bull. Soc. Path. végét. Fr. II (1915) 4406
p. 26, c. ic. — Maculis vage circularibus, 2 mm. circ. diam., e mycelio repente, arcte adnato, radiante, fusco constitutis; hyphis copiose dichotomicè ramosis, $7-9 \mu$ cr., crebre septatis, ad septa constrictis, propagulis (hyphopodiis) 1-2-pluricellularibus ornatis; peritheciis atris, sphaeroideis, 250μ diam.; setis rigidis, brunneis, basi dilatatis, apice plus minusve angustatis, $55-60 \times 9-12$, ornatis; ascis ellipsoideis, bisporis, $60-70 \times 40-50$; sporidiis cylindraceo-ellipsoideis, utrinque obtusis, 4-septatis, ad septa constrictulis, fuscis, $45-50 \times 16-18$.

Hab. in foliis *Heveae* sp. (Euphorbiaceæ), in America tropicali.

65. *Meliola Ramosii* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 552. — 4407
Epiphylla, plus minus effusa, maculas atras parum conspicuas sub-arachnoideas 1-3 mm. latas v. confluyendo majores et irregulares formans; mycelio modice evoluto, ex hyphis ramosis anastomosantibusque fusco-brunneis $6-7,5 \mu$ crassis composito; hyphopodiis capitatis alternantibus, modice copiosis, cellula basali brevi v. brevissima, superiore late rotundata subglobosa, obscure brunneis, totis $16-22 \times 11-15$; hyphopodiis mucronatis ampulliformibus, op-

positis, 18-22 μ long.; setis mycelicis numerosis, basi saepe abrupte geniculatis, circa perithecia oriundis, erectis, rectis, simplicibus, 2-5-septatis, fusco-brunneis, apice late rotundatis, 120-200 \approx 7-8; peritheciis sparsis, globulosis, in sicco profunde collapsis, 140-175 μ diam., parum tuberculatis, ostiolatis; ascis subglobosis v. ovatis, 2-4 sporis, 32-42 \approx 25-32; sporidiis oblongis, utrinque late rotundatis, 4-septatis, leniter constrictis, brunneis, 26-32 \approx 12-14.

Hab. in foliis *Homonoiae ripariae* (Euphorbiaceae), Antipolo prov. Rizal Luzon, Ins. Philippin. (M. RAMOS).

66. *Meliola Jatrophae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4408 1916, p. 516. — Coloniae epiphyllis, circularibus vel irregularibus, 1-4 mm. diam.; mycelio ex hyphis 7 μ crassis, ramis plerumque oppositis, laxe reticulato-contextis efformato; hyphopodiis capitatis alternis vel irregulariter dispositis, angulo acuto insertis, 27 μ circ. inter se distantibus, cellula capitata ovoidea, 17 \approx 7, apice obtusa, basilari brevi; hyphopodiis mucronatis copiosis et in ramis nonnullis dense confertis, oppositis, ampulliformibus; setis perithecialibus nullis, mycelialibus paucis, basi perithecorum excepta ubi numerosae adsunt, curvis, 250 μ circ. longis, fuscis, apice acutis; peritheciis 130-150 μ diam., scabriusculis; ascis mox evanidis; sporidiis cylindraceutis, 4-septatis, brunneis, leniter constrictis, obtusis, brevibus, crassis, 30 \approx 17.

Hab. in foliis *Jatrophae hernandifoliae* (Euphorbiaceae), Rio Tanama et Dos Bocas, Porto Rico. — Crassitie sporidiorum structura et insertione hyphopodiorum praecipue distincta.

67. *Meliola Macarangae* Syd., Ann. Mycol., 15., 1917, p. 188. — 1 Syn. M. 4409 *Macarangae* H. S. Yates, Philipp. Journ. of Sc. 12., 1917, p. 367. — Hypophylla vel caulicola, rarius etiam epiphylla, plagulas orbiculares 3-10 mm. latas velutinas aterrimas, crassiusculas formans: mycelium ex hyphis densissime ramosis et intertextis 8-9 μ crassis castaneo brunneis compositum, ramulis plerumque brevibus; hyphopodia capitata sat numerosa irregularia, 22-28 μ longa, cellula superiore 15-18 μ lata angulata vel parum lobata, cellula inferiore mox brevi mox longiore; setae mycelii copiosissimae, rectae vel parum subinde flexuosae, atrae, opacae, sublanceolatae, ad apicem acutatae, 180-350 μ longae, basi 9-12 μ latae; perithecia copiose aggregata, globosa, 170-200 μ diam., glabra; asci 2-rarius 3-spори; sporaе oblongae 4-septatae, vix vel leniter constrictae utrinque rotundatae, in maturitate obscure castaneo-brunneae, 40-52 \approx 12-22, cellulis duabus extimis minoribus.

Hab. in foliis *Macarangae Tanarii* et *M. bicoloris* (Euphorbiaceae), San Antonio, Laguna, Luzon Ins. Philipp. (M. RAMOS et R. C. MC GREGOR).

68. *Meliola apayaensis* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4410 13., 1918, p. 364. — Amphigena, plerumque epiphylla, plagulas atras, velutinas, orbiculares, 3-8 mm. diam. efformans; mycelio ex hyphis radiantibus brunneis septatis 6-7 μ latis composito, articulis 25-35 μ longis; hyphopodiis capitatis numerosis, alternantibus, vel unilaterialibus, bicellularibus, cellula superiore ovata vel lobata 15-18 μ diam., cellula inferiore 6-10 μ longa; hyphopodiis mucronatis non visis; setis mycelicis numerosissimis, erectis, rectis vel leviter curvatis, atris, opacis, versus apicem brunneis, acutis, 200-280 μ longis, 10-12 μ cr.; peritheciis paucis, globosis, tuberculatis, atris, opacis, 175-200 μ diam.; ascis bisporis, 50-60 \times 20-30; sporidiis 4-septatis, ad septa leviter constrictis, subcylindraceis, utrinque rotundatis, brunneis 50-58 μ longis, 13-16 μ latis.

Hab. in foliis *Macarangae Tanarii* (Euphorbiaceae), Subprov. Apayao, Luzon, Ins. Philipp. (FELIX).

69. *Meliola subapoda* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 547. — 4411 Hypophylla, plagulas orbiculares $\frac{1}{2}$ -1 cm. diam. tenues formans; mycelio ex hyphis longis rectis v. flexuosis 5-7 μ cr. remote septatis (articulis 30-50 μ long.) fuscis non v. parce ramosis composito; hyphopodiis capitatis rarissimis v. fere nullis, continuis, 16-20 \times 8-10, integris v. irregularibus; setis nullis; peritheciis laxe gregariis v. sparsis, globulosis, grosse verrucosis, 140-190 μ diam.; ascis ovatis, 2-3-sporis; sporidiis ellipsoideis, utrinque attenuatis, 4-septatis, constrictis, obscure castaneo-brunneis, 36-39 \times 13-15, loculis mediis majoribus.

Hab. in foliis *Malloti philippinensis* (Euphorbiaceae), Angat prov. Bulacan Ins. Philippin. (M. RAMOS).

70. *Meliola sauropicola* H. S. Yates, Philippin. Journ. Sc. Manila, XII 441 (1917) p. 368. — Epiphylla, rariter caulicola, maculas dispersas, atras, orbiculares, 2-4 mm. diam., saepe confluentes; mycelio ex hyphis ad basim perithecii centrifugis rectis septatis ramosis 6-8 μ latis composito; hyphopodiis capitatis-numerosis, alternantibus vel irregularibus, bicellularibus, cellula superiore 15-20 \times 10-12, inferiore 8-10 μ longa; hyphopodiis mucronatis numerosis, alternantibus vel irregularibus, ampulliformibus, usque ad 20 μ longis; setis mycelicis erectis, rectis vel leviter curvatis, 500-650 \times 12-15, inferne opacis, atris, apicem versus obscure brunneis, obtusis, simplicibus;

peritheciis rotundatis, applanatis, 110-160 μ diam., contextu ex cellulis plus minus radiantibus 6-8 μ diam. composito, in siccis collapsis; ascis evanescentibus, circiter 2-4-sporis: sporidiis cylindraceis, utrinque rotundatis 4 septatis, ad septa leviter constrictis, fuscis, 42-45 \times 15-17.

Hab. in foliis *Sauropi* sp. (Euphorbiaceae), Catubing River, Ins. Philipp. (RAMOS).

71. *Meliola pteridicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4413 II, 1916, p. 396, fig. 27. — Coloniis amphigenis, plerumque vero epiphyllis, 1-6 mm. diam.; mycelio laxo reticulato, ex hyphis subrectis, saturate fuscis, obscure septatis, subparallelis, ramosis constituto; hyphopodiis capitatis alternis vel irregularibus, non crebris, 30 μ circ. inter se distantibus, ovoideis vel piriformibus, 17 \times 3, apice incrassatis, cellula basilari brevissima; hyphopodiis mucronatis paucis et sparsis vel in ramis quibusdam copiosis, alternis vel oppositis, tenuibus, phialiformibus, 16-18 \times 7, rostro angusto; setis mycelialibus nullis, perithecialibus paucis, 3-10, fuscis, rectis vel apice leniter incurvis, 90 \times 7; peritheciis 170 μ diam., ob papillulas rotundatas 6-10 μ prominentibus scabris, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 35-40 \times 4.

Hab. copiosa in foliis petiolisque *Aneimiae* et *Adianti* spec. plur. (Filices), Porto Rico. — Ob hyphas subparallele decurrentes praecipue distincta.

72. *Meliola Paullinae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4414 1916, p. 513. — Coloniis atris, setosis, circularibus, epiphyllis, 3-8 mm. diam.; mycelio ex hyphis rectis, oppositis ramosis, 8 μ cr., radiatis, laxo reticulato-contextis efformato; hyphopodiis capitatis alternis, saepe rectangulariter insertis, haud crebris, singulis in quaque cellula, cellulis 34 μ circ. longis, cellula capitata ovoidea 17 \times 14, basilari brevi, hyphopodiis mucronatis saepius oppositis, phialiformibus, rostro tenuiusculo; setis perithecialibus nullis, mycelialibus copiosis, rectis, simplicibus, ubique atris, rigidis, abrupte acutatis, 275-500 \times 8-9; peritheciis 150-160 μ diam.; ascis evanescentibus; sporidiis 37-40 \times 14-15, 4-septatis, constrictis, obtusis.

Hab. in foliis *Casariae* (Flacourtiaceae), *Mammeae* (Guttiferae), *Paullinae* (Sapindaceae), Porto Rico. — Specimina in Casaria et in Mammea interdum a typo paullo recedunt. Species *M. polytrichae* affinis.

73. *Meliola Tonduzi* Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. 4415

Cienc. Cordoba, t. 23., 1919, Extr. p. 190. — *Amphigena*; plagulae orbiculares parvae 3-5 mm. diam. v. confluyendo magnae 8-15 mm. ac diffformes, aterrimae; hyphae repentes rectiusculae oppositae ramosae, 7-10 μ cr., hyphopodiis saepius oppositis obovatis, 20-25 \times 12-15, nonnullis ampulluliformibus intermixtis, laevibus, setulis parum numerosis erectis rectis opacis rigidulis apice subobtusiusculis praeditae; perithecia disco hypocarpico destituta, globosa glabra subpapillulosa, non collabescentia, astoma nigerrima opaca 120-150 μ diam.; asci elliptici 2-4-spори, 80-120 \times 40; sporae cylindraceo-subfusoidae, saepius leniter naviculares, utrinque acutiusculae, 3-septatae, ad septa non v. vix constrictae, obscure fuligineae, 40-55 \times 20-24.

Hab. in foliis vivis *Xylosmatis Salzmanni* (Flacourtiaceae), prope Carthago Costarica, America trop.

74. *Meliola rigida* Doidge, Trans. R. Soc. South Afr. V, 1917, p. 736 4416 et 747, t. 64 fig. 36. — *Amphigena*, maculas atras usque ad 1 cm. diam. efficiens; hyphis rigidis, 7-8 μ crassis, brunneis, cellulis 18-25 μ longis, ramis plerumque oppositis; hyphopodiis capitatis numerosis, oppositis breviter stipitatis 14-18 μ long., cellula superiore ovata globulosa, 10-12 \times 8-10; hyphopodiis mucronatis non numerosis, pallidioribus, oppositis circa 18 μ long., setis mycelicis erectis, simplicibus, plus minusve sinuosis, atris, opacis, 250-600 \times 10-11; peritheciis sparsis, atris, globulosis, verrucosis, 180-220 μ diam.; ascis ovatis, breviter stipitatis, 3-sporis; sporidiis 4-septatis, leniter constrictis, oblongis, compressis, utrinque rotundatis, 40-45 \times 18-20.

Hab. in foliis *Xymalos monosporae* (Flacourtiaceae), Woodbush, Zoutpansberg Dist., Africa austr. (E. M. DOIDGE).

75. *Meliola Othophorae* H. S. Yates, F. from Brit. N. Borneo, in Philipp. Journ. of Sc. Bot., v. 13., 1918, p. 235. — Maculis epiphyllis, atris, orbicularibus vel suborbicularibus, 2-5 mm. diam.; mycelio copioso, ex hyphis rectis vel tortuosis brunneis 7-8 μ crassis, ramosis composito; ramis plerumque alternantibus; hyphopodiis capitatis numerosis, cellula superiore oblonga vel subinde lobata, 10-12 \times 6-10, cellula inferiore 5-6 μ longa; hyphopodiis mucronatis paucissimis, ampulluliformibus, usque ad 15 μ longis, setis mycelicis erectis, rectis, obscure brunneis, 350-450 \times 7-8 cr. acutis; peritheciis numerosis, globosis, atris, opacis, 150-200 μ diametro; ascis ovoideis, 30-35 \times 18-20, bisporis; sporidiis 4-septatis, ad septa constrictis, cylindraceis, utrinque obtasis, brunneis, 30-32 \times 8-12.

Hab. in foliis *Othophoræ fruticosæ* (Gentianaceæ), Sapon, in ins. Borneo bor.

76. *Meliola Gesneriæ* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4418 1916, p. 515. — Coloniis hypophyllis, circularibus, 2-8 μ diam.; mycelio atro, dense reticulato, 7 μ diam., ramis plerumque oppositis; hyphopodiis capitatis alternis, haud crebris, uno pro cellula, cellulis 24 μ circ. longis, cellula capitata ovato-globosa, 10 \times 14, basilaris 4-7 μ longa; hyphopodiis mucronatis alternis vel oppositis, phialiformibus; setis perithecialibus nullis, mycelialibus rectis vel leniter curvis, 400 \times 7, ubique fuscis, circa perithecia copiosioribus, apice acutis; peritheciis 110 μ diam., levibus; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, 41 \times 17.

Hab. in foliis *Gesneriæ albifloræ* (Gesneriaceæ) et *Cestri* sp. (Solanaceæ), Porto Rico.

77. *Meliola Scevolæ* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 551. — 4419

Hypophylla, plagulas minutas orbiculares 2-4 mm. latas tenues formans; mycelio radiante, ex hyphis omnino rectis fuliginis crassiuscule tunicatis 5-7 μ cr. composito; hyphopodiis alternantibus, 12-16 μ long., cellula superiore globosa v. subglobosa et 10 μ diam., inferiore minuta saepe brevissima; hyphopodiis mucronatis oppositis, ampulliformibus, usque 22 μ long.; setis mycelicis parvis, rectis, fuliginis, tota longitudine pellucidis, crassiuscule tunicatis, remote septatis, apice obtusis, 250-375 \times 5-7; peritheciis parvis, globosis, grosse verrucosis, atris, 120-150 μ diam.; ascis ovatis, bisporis; sporidiis cylindræis, utrinque obtusis, 4-septatis, parum constrictis, fuliginis, 35-38 \times 13-15.

Hab. in foliis *Scaevolæ frutescentis* (Goodeniaceæ), Bales prov. Tayabas Luzon, Ins. Philippin. (L. ESCRITOR).

78. *Meliola heterotricha* Syd. in Leaflets of Philipp. Bot. VI (1913), 4420 p. 1923. — Mycelio hypophyllo, maculiformi, plagulas atras valde conspicuas, 1-3 cm. diam. efformante, ex hyphis ramosis anastomosantibus, saepe longitudinaliter connatis, atro-brunneis, opacis, 6-8 μ latis composito; hyphopodiis mucronatis paucis, oppositis vel alternis, 18-26 μ longis; hyphopodiis capitatis numerosis, alternantibus, bicellularibus, rectis vel curvatis, 18-22 \times 7-9, cellula basali brevi; setis mycelicis numerosis, erectis, rectis, rigidis, opacis, 200-375 \times 6-8, septatis, biformibus: aliis simplicibus, apice obtusis, aliis apice 2-3-furcatis, dentibus mox exiguis mox elongatis et 8-12 μ longis; peritheciis aequaliter distributis, globosis, 160-200 μ diam., rugulosis; ascis ovatis, bisporis, fugacibus; spo

ridiis oblongis, utrinque obtusis, 4-septatis, ad septa constrictis, fuscis, 36-44 \times 10-12.

Hab. in foliis *Donacis cannaeformis* (Graminaceae), Cabadbaran, Mindanao, ins. Philipp. — Ob setas diffformes *M. Mangiferae* Earle proxima, sed setis minoribus, hyphis angustioribus et sporidiis angustioribus et constrictis diversa.

79. *Meliola Imperatae* Syd., Ann. Mycol. 15., 1917, p. 186. — Amphigena, plagulas minutas elongatas 2-5 mm. longas atras formans; mycelium ex hyphis rectangulariter denseque ramosis obscure brunneis 6-9 μ crassis septatis flexuoso-undulatis vel rectiusculis compositum; hyphopodia capitata copiosa, alternantia, tota 22-25 μ longa, cellula basali cylindracea brevi vel longiore 5-10 μ longa, cellula superiore ovata aut saepius leniter angulata vel parum lobata 14-17 μ lata; hyphopodia altera (vix mucronata dicenda) opposita vel solitaria, rara continua, cylindracea, obtusa, 12-15 μ longa, 7-9 μ lata; setae mycelicae haud numerosae, rectae, 250-400 μ longae, 9-11 μ crassae, tota longitudine atrae opacae, ad apicem dentibus irregularibus plus minus erectis 2-6 sive brevibus sive longioribus (tunc usque 15 μ longis) plerumque obtusis praeditae; perithecia sparsa vel laxe gregaria, 150-180 μ diam.; asci 2-3-spори, diffuentes; sporae cylindraceae, utrinque rotundatae, 4-septatae, leniter constrictae, fuscae, 35-42 \times 12-14. 4421

Hab. in foliis *Imperatae cylindricae* (Graminaceae), Rizal et San Antonio, Luzon Ins. Philipp. (M. RAMOS).

80. *Meliola panicicola* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 552. — Amphigena, plagulas minutas v. mediocres plus minus determinatas tenues formans; mycelio radiante, ex hyphis fuscis ramosis, 5-7 μ crassis composito; hyphopodiis capitatis numerosis, alternantibus, 17-22 \times 10-13, loculo superiore angulato-globuloso v. truncato sed haud lobato; hyphopodiis mucronatis rarioribus, oppositis; setis mycelicis numerosis, rectis, rigidis, apice obtusis, superne pellucidis, inferne minus pellucidis v. opacis, remote septatis, crasse tunicatis, 400-550 μ long. 9-12 μ latis; peritheciis sparsis, globosis verrucosis, astomis, 110-150 μ diam.; ascis ovatis, bisporis; sporidiis cylindraceis, utrinque late rotundatis, griseo-fuscis, 4-septatis, non v. parum constrictis, 30-35 \times 11-13. 4422

Hab. in foliis *Panici palmaefolii* (Graminaceae), Mt. Isaroy Camarines, Ins. Philippin. (M. RAMOS).

81. *Meliola substenospora* v. Höhn. — Syll. XXII p. 56. — fm. *Rottboelliae* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, 4423

VI (1914) p. 2193. — Absque diagnosi.

Hab. ad folia *Rottboelliae exaltatae* (Graminaceae), Los Baños, ins. Philipp. (S. A. REYES et M. B. RAIMUNDO).

82. *Meliola Sacchari* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 548. — 4424

Plagulas atras minutas 1-3 mm. longas saepe confluyendo majores et subinde totam folii superficiem obtegentes formans; mycelio dense contexto ex hyphis crebre ramosis anastomosantibus obscure fuscis 8-10 μ cr.; hyphopodiis capitatis alternantibus sat numerosis, clavato-capitatis, 18-22 μ long., cellula basali brevi, superiore rotundata 13-15 μ lata; hyphopodiis mucronatis copiosis, oppositis, usque 18 μ long.; setis mycelicis erectis, rectis, 175-400 \times 9-12, atris, opacis, ad apicem irregulariter in ramos 2-6 (saepius 4) plerumque brevissimos usque 10 μ tantum longos erectos rarius elongatos et tunc usque 30 μ longos divisos; ramulis iterum irregulariter denticulato-vel digitiformiter divisos; peritheciis sparsis, globosis, atris, 150-200 μ diam., ex cellulis 10-12 μ diam. contextis; ascis ovatis, plerumque 2-sporis, fugacibus; sporis 4-septatis, oblongis, utrinque late rotundatis, fuscis, 40-48 \times 14-18, leniter constrictis, cellulis aequalibus.

Hab. in foliis *Sacchari spontanei* (Graminaceae), Ifugao, Luzon, Ins. Philippin. (R. O. Mc GREGOR), *Imperatae cylindricae*, Mt. Maquiling prov. Laguna, Luzon (E. D. MERRILL).

83. *Meliola Stenotaphri* Stev., Mel. Porto Rico, in III. Biol. Monogr. II, 4425

1916, p. 509, fig. 38. — Mycelio sinuoso vel zig-zag-undulato; hyphopodiis capitatis alternis, hinc inde unilateralibus, distincte pedicellatis, e cellula basilari 5-9 \times 7, capitata, sphaerica vel ovata, circ. 20 \times 14; hyphopodiis mucronatis paucis, oppositis vel alternis, ampulliformibus, 14 \times 7; setis mycelialibus atris, opacis, 275 μ longis, basi 7 μ cr., apice simplicibus et acutis, rarissime bifidis; setis perithecialibus nullis; peritheciis minutis, 100 μ circ. diam., ob papillulas rotundatas scabris; sporidiis oblongis, 4-septatis, obtusis, leniter constrictis, 30-44 \times 10-14.

Hab. in foliis *Stenotaphri secundati* (Graminaceae), Porto Rico. — Characteribus mycelii et hyphopodiorum facile dignoscenda.

84. *Meliola Calophylli* Stev., Mel. Porto Rico, in III. Biol. Monogr. II, 4426

1916, p. 490. — Coloniis ut plurimum epiphyllis, irregularibus, diffusis, 1-10 mm. diam.; mycelio ex hyphis irregulariter ramosis, 7 μ diam., laxe reticulato-contextis constituto; hyphopodiis capitatis alternis vel irregularibus, non crebris, 35 μ circ. inter se di-

stantibus, cellula capitata ovoidea vel pyriformi, saepe angulosa et irregulari, 24×17 , basilari 14μ vel minus longa; hyphopodiis mucronatis irregulariter distributis, ampulliformibus, angustis, 20μ circ. longis; setis mycelialibus nullis, perithecialibus copiosissimis, larviformibus, curvis, apice obtusis, pellucidis, 51×17 ; peritheciis 220μ diam., regione ostiolarum minuta; ascis mox evanidis; sporidiis 4-septatis, brunneis, valde constrictis, obtusis, $44-47 \times 17$.

Hab. in foliis *Calophylli Calabae* (Guttiferae), Mayaguez, Porto Rico. — Species appendicibus copiosissime larvaeformibus, transverse striatis et simulate septatis facile dignoscenda.

85. *Meliola Clusiae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4427 1916, p. 520. — Coloniae hypophyllis, irregularibus, diffusis, 3-5 mm. diam., mycelio brunneo, 8μ cr., subrecto, ramis ut plurimum oppositis; hyphopodiis capitatis alternis, uno pro cellula, cellulis 30μ circ. longis, cellula capitata ovoidea vel ellipsoidea, rarius cylindrica vel irregulari, 20×14 , basilari $2-4 \mu$ longa; hyphopodiis mucronatis sparsis, 20×7 , phialiformibus; setis perithecialibus nullis, mycelialibus paucis, 800×10 , ad basim, apice obtuso, fragili, saepius rupto, circa perithecia confertis; peritheciis simulate dimidiatis, areola hypharum radiantium tectis; sporidiis 4-septatis arcte constrictis, obtusis, cylindraceis. 61×20 .

Hab. in foliis *Clusiae minoris* (Guttiferae), El Alto de la Bandera, Porto Rico.

86. *Meliola mangostona* Sacc., Notae Mycol. XXIV p. 4 (Bull. Orto bot. 4428 Nap., 1918). — Coloniae epiphyllis, irregularibus, nigricantibus, saepe late confluentibus tenuiter velutinis; subiculi hyphis eximie reticulatis, brunneis; hyphopodiis ovato-oblongis apice rotundatis, bicellularibus, 20×9 , rarius mucronatis $22 \times 6-7$; setis nullis visis; peritheciis globosis, prominulis, 180μ diam. sublevibus, nigris; ascis ellipsoideo-oblongis, 4-sporis; sporidiis tereti-oblongis, utrinque rotundatis, constricto-4-septatis, $45-46 \times 12-14$, brunneis.

Hab. in foliis *Garciniae mangostanae* (Guttiferae), in Horto bot. Singapore (BAKER). — Species in foliis *Garciniae Kydiae* (ibidem) colonis saturate nigricantibus, crebrioribus, amphigenis 4-5 mm. latis, setigeris est diversa species, pulcherrime denseque reticulata sed exemplaria nimis vetusta indeterminanda (*Mel. Kydia* ad interim).

87. *Meliola Garciniae* H. S. Yates, The Philipp. Journ. of Sc. Bot., 4429 13., 1918, p. 369. — Maculas plerumque epiphyllas irregulares, 5-10 mm. diam. vel confluentes, atras, crustaceas efformans; mycelio

ex hyphis castaneis 8-10 μ crassis formato; ramis plerumque oppositis; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore subglobosa vel ovata, 12-14 \times 11-12, cellula inferiore 8-10 μ longa; hyphopodiis mucronatis numerosis, alternantibus vel oppositis, ampulliformibus, usque ad 25-30 μ longis; setis mycelicis numerosis, rectis, erectis, 11-13 μ crassis 700-1000 μ longis, atris, opacis, acutis vel obtusis; peritheciis paucis, globosis, atris, opacis 200-300 μ diam.; ascis non visis; sporidiis castaneis, cylindræis, utrinque rotundatis, 4-septatis, ad septa vix constrictis, 50-55 \times 18-20.

Hab. ad folia *Garciniae* sp. (Guttiferae), Burgos Prov. Locos Norte, Luzon, Ins. Philipp. (RAMOS).

88. *Meliola torta* Doidge, Trans. R. Soc. South. Afr. V, 1917, p. 726 4430 et 744, t. 60 f. 16. — *Amphigena*, maculas atras tenues, 5-10 mm. diam. efficiens; hyphis tenuibus, 6-7 μ crassis, tortuosis, anastomosantibus, cellulis 25-36 μ long.; ramis irregularibus plerumque unilateralibus; hyphopodiis capitatis tenuibus, cellula superiore 14-25 \times 14-20, diverse lobata, torta, apice obtusa v. convexa; hyphopodiis mucronatis, ampullaceis, 20-36 μ long.; setis mycelicis non numerosis, sparsis rectis, simplicibus, basi 10-11 μ cr., apice acutis; peritheciis paucis, sparsis, atris, globulosis, rugulosis, 160-250 μ diam.; ascis numerosis, 8-sporis; sporidiis distichis v. conglobatis, 3-septatis ad septa vix constrictis, clavatis, 25-30 \times 7-11.

Hab. in foliis *Trichocladi criniti* (Hamamelidaceae), Izeleni, Kingwilliamstown, Africa austr.

89. *Meliola Reinkingii* Sydow, Ann. Mycol. 18., 1920, p. 98. — Plagulae amphigenae, orbiculares, 2-4 mm. diam., subvelutinae, aeternae; mycelium ex hyphis longis castaneo-brunneis 4-6 μ crassis subrectis vel parum undulatis copiose rectangulariter ramosis anastomosantibusque septatis compositum; hyphopodia capitata satis numerosa, alternantia, 20-25 μ longa, cellula inferiore longiuscula, superiore plerumque plus minus lobata rarius integra 8-12 μ lata; hyphopodia mucronata rariora; setae mycelicae modice copiosae, rectae, simplices, 250-300 μ longae, basi 6-10 μ crassae, tota longitudine opacae, ad apicem acutae; perithecia laxè gregaria, 100-120 μ diam., in sicco collapsa; asci fugaces; sporae cylindræae, 3-septatae, obscure castaneo brunneae, constrictae, utrinque obtusae, 38-48 \times 13-16.

Hab. in foliis *Hippocrateae* spec. (Hippocrateaceae), Maria Cristina Falls, Lamac, Ins. Philippin. (O. H. REINKING).

90. *Meliola cavitensis* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4432
13., 1918, p. 366. — Epiphylla, plagulas orbiculares vel irregulares,
2 ad 6 mm. diam. tenues efformans; mycelio ex hyphis longis,
rectis vel flexuosis 6-7 μ crassis septatis brunneis ramosis compo-
sito; articulis 20:25 μ longis; hyphopodiis capitatis numerosis, ple-
rumque alternantibus, cellula superiore subglobosa vel ovata, 12 μ
diam., cellula inferiore 5-6 μ longa; hyphopodiis mucronatis nu-
merosis, oppositis vel alternantibus, ampulliformibus, usque ad 25 μ
longis; setis mycelicis paucis, rectis vel curvatis, septatis, obscure
brunneis, obtusis 300-400 μ longis, 8-10 μ latis; peritheciis nume-
rosis, globosis, obscure brunneis, subopacis, 85-100 μ diam.; ascis
clavatis, 35 μ longis, 8-10 μ latis, circiter 6-8-sporis; sporidiis cy-
lindræis, utrinque rotundatis, 4-septatis, ad septa constrictis,
brunneis 30-35 \times 10-12.

Hab. ad folia Colei sp. (Labiate), Talisay ridge, Prov. Cavite,
Luzon, Ins. Philipp. (MERRILL).

91. *Meliola hyptidicola* Stev., Meliol Porto Rico in Illin. Biolog. Mo. 4433
nogr. II, 1916 p. 484, fig. 8. — Coloniis amphigenis, praecipue hy-
pophyllis, irregularibus, diffusis; mycelio atro, reticulum laxum ef-
formante, 7 μ diam., ramis irregularibus; hyphopodiis capitatis mi-
nutis, alternis vel irregulariter dispositis, non crebris, uno pro cel-
lula, cellulis 20 μ circ. longis; cellula capitata ovoidali 14-17 \times 9,
basali 3-6 μ longa; hyphopodiis mucronatis paucis, ampulliformi-
bus; setis mycelialibus et perithecialibus nullis; peritheciis 100-
140 μ , scabrinusculis; ascis mox evanidis; sporidiis 4-septatis, brun-
neis, lenissime constrictis, obtusis, 31-34 \times 10-13.

Hab. in foliis Hyptidis spec. plur. (Labiate), Porto Rico. —
Var. *wombalensis* Beeli, Bull. Jard. Bot. de l'Etat Bruxelles, v. 7.,
1920, p. 95. — A typo differt peritheciis (140-200) et sporidiis ma-
joribus (32-40 \times 13-16). — *Hab.* in foliis Hyptidis sp., Wombali,
Congo Africae trop. (VANDERHYST).

92. *Meliola pelliculosa* Syd., Enum. Philipp. Fungi II, in Philipp. 4434
Journ. of Sci. VIII (1913) p. 480. — Amphigena, foliorum super-
ficiem pellicula plus minus continua aterrima facile separabili ob-
ducens; mycelio ex hyphis densissime intertextis, obscure fuscis,
7-9 μ cr., ramosis, septatis composito; hyphopodiis capitatis nu-
merosissimis, breviter cylindræis vel subclavatis, apice late ro-
tundatis, 14-20 \times 8-10, fuscis, cellula basali brevi; hyphopodiis mu-
cronatis rarioribus, ampulliformibus, usque ad 21 μ longis; setis
mycelicis rectis, rigidis, apice acutis, simplicibus, opacis, superne

subinde plus minus dilutioribus, 150-320 \times 7-9; peritheciis sparsis, minutis, globosis, tuberculatis, 100-130 μ diam.; ascis bisporis, ovatis, 40-50 \times 25-35; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa valde constrictis, obscure brunneis, 39-45 \times 14-17.

Hab. in foliis vivis vel languidis *Lumnitzerae racemosa* (Labiatae), Luzon, prope Manila, ins. Philipp. — *M. gymnosporiae* Syd. affinis, quae vero setis omnino caret.

93. *Meliola Litseae* Syd., Ann. Mycol. 15., 1917, p. 187. — Syn. *Mel. Litseae* A. S. Yates, Philipp. Journ. of Sc. 12., 1917, p. 366, *Mel. Litseae* P. Weid. Graff, Mem. Torr. Bot. Cl. 17., 1918, p. 61. — Amphigena, plagulas primitus minutas orbicularis 2-4 mm. latas dein saepe confluentes et effusas tennes formans; mycelium ex hyphis 9-10 μ crassis obscure brunneis septatis ramosis compositum; hyphopodia capitata numerosa, alternantia, subcylindracea vel ovato-oblonga, 21-27 μ longa, cellula basali brevi vel mediocri, cellula superiore semper integra ovata vel ovato-oblonga et 10-13 μ lata; hyphopodia mucronata solitaria vel opposita, rara, usque 26 μ longa; setae myceliales modice copiosae, subrectae vel curvatae, 350-700 μ longae, 9-11 μ crassae, bifformes; aliae in superiore parte pellucide brunneae plus minus late rotundatae obtusae et integrae, aliae tota longitudine opacae ad apicem dentes vel ramulos breves 2-4 usque 12 μ longos gerentes; perithecia sparsa globosa 160-180 μ diam.; in sicco collapsa; asci 2-3 spori; spores oblongae, utrinque late rotundatae, castaneo-brunneae, 4-septatae, vix vel leniter constrictae, 40-45 \times 18-20. 4435

Hab. in foliis *Litseae Perrottetii*, *L. glutinosae* (?) (Lauraceae), Los Baños, Calauan, Bataan, S. Antonio etc., Ins. Philipp. (BAKER, MC GREGOR, RAMOS). — *Mel. Litseae* Yates, et P. W. Graff, etiam ex Philippinis, verisimiliter eadem est ac *M. Litseae* Sydow quae anterior.

94. *Meliola Ocoteae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 497. — Coloniae hypophyllis, irregularibus 5-10 mm. diam.; mycelio atro, 6 μ crasso, sinuoso, laxo, opposito vel alterne ramoso; hyphopodiis capitatis alternis vel unilateralibus, 50-80 μ inter se distantibus, cellula capitata ovoidea vel angulari, 20 \times 14, basilari 10-14 μ longa; hyphopodiis mucronatis paucis, ampulliformibus; setis mycelialibus nullis, perithecialibus copiosis, rectis vel leniter curvis, rigidis, fuscis, apice obtusis, 85 μ circ. longis; peritheciis 170 μ diam., atris; ascis evanidis; sporidiis 4-septatis, fuscis, constrictis, utrinque paullo attenuatis, 50 \times 14. 4436

Hab. in foliis *Ocoteae leucoxyli* (Lauraceae), Jajome Alto, Porto Rico. — *M. Mollerianae* similis sed characteribus mycelii et setarum peritheci distincta. Status conidicus saepe copiosus.

95. *Meliola ocoteicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4437 1916, p. 513, fig. 43. — Coloniis amphigenis, irregularibus, 3-10 mm. diam., confluentibus; mycelio laxiuscule reticulato-texto, ramis plerumque oppositis, 7 μ crasso; hyphopodiis capitatis alternis, haud crebris, 30 μ circ. inter se distantibus, cylindraceis, cellula capitata basilari vix crassiore, apice obtusa, cellula basilari brevissima; hyphopodiis mucronatis paucis, sparsis, plerumque oppositis, conoideo-ampulliformibus, 20 \times 6; setis perithecialibus nullis, mycelialibus paucis, rectis curvalisve, 300-350 μ longis, fuscis, apice acutis; peritheciis 150 μ diam., non ostiolatis; ascis cito diffuentibus; sporidiis 4-septatis, brunneis, valde constrictis utrinque obtusis, 40 \times 17.

Hab. in foliis *Ocoteae leucoxyli* (Lauraceae), Mayaguez et Monte Alegrillo, nec non in foliis *Chrysophylli* sp. (Sapotaceae), Monte Alegrillo, Porto Rico.

96. *Meliola acutiseta* Syd., in Leaflets of Philipp. Bot. VI (1913) 4438 p. 1921. — Mycelio hypophyllo plagulas circulares 3-10 mm. latas, atras efformante, ex hyphis longiusculis, parce ramosis, obscure brunneis, 5-6,5 μ crassis composito; hyphopodiis mucronatis raris, plerumque oppositis, 15-20 μ longis; hyphopodiis capitatis variabilibus, bicellularibus, rectis vel leniter curvatis, saepe leniter lobatis aut angulatis, 15-20 \times 6-10; setis mycelicis numerosis, simplicibus, rectis, erectis, apice acutis, opacis, 275 400 \times 7-9, peritheciis sparsis, globosis, in sicco non vel vix collapsis, aterrimis, leniter rugulosis, 150-180 μ diam.; ascis ovatis, 2-3-sporis, 40-55 \times 18-28; sporidiis oblongis, 4-septatis, ad septa leniter constrictis, utrinque rotundatis vel uno fine saepe leniter attenuatis, brunneis, 35-40 \times 11,5-13.

Hab. in foliis vetustis *Perseae piriformis* (Lauraceae), Cabadbaran, Mindanao, ins. Philipp. — Affinis *M. laevigatae* Syd. cui habitu similis sed characteribus hyphopodiorum, setularum et sporidiorum distincta.

97. *Meliola Perseae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4439 1916, p. 485 fig. 10. — Coloniis hypophyllis, irregularibus, atris, 2-5 mm. diam.; mycelio valde contorto, sinuoso, irregulariter, opposito, alterne vel dichotome ramoso, intense atro, 9 μ crasso; hy-

phopodiis capitatis alternis vel irregularibus, cellula capitata ovato-piriformi, cuneiformi vel angulosa; hyphopodiis mucronatis alternis, variabilibus; setis mycelialibus et perithecialibus nullis; peritheciis 100-200 μ diam., atris, ob papillas late conoideas scabris; ascis evanidis; sporidiis 4-septatis, valde constrictis, atro brunneis, utrinque rotundatis, 44 \times 24.

Hab. in foliis *Perseae* gratissimæ (Lauraceae), Las Marias, Porto Rico. — Mycelio valde irregulari et setularum defectu praecipue distincta; *M. calvae* proxima, a qua tamen peritheciis scabris recedit.

98. *Meliola indica* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 382. — 4440

Amphigena velutina; mycelio maculas atras orbiculares 2-6 mm. latas formante; hyphis fuscis, 6-8 μ cr.; hyphopodiis numerosis et dense stipatis, capitatis oppositis v. alternantibus, usque 14 μ long. et 11 μ latis, mucronatis oppositis et usque 18 μ long.; setis mycelii numerosis, simplicibus, rigidis, remote septatis, acutis, 250-400 μ long. 9-12 μ crassius; peritheciis globosis, atris, verruculosis, 170-210 μ diam.; ascis fugacibus, 2-4 sporis; sporidiis 4-septatis, constrictis, utrinque rotundatis, fuscis, 45-50 \times 14-18.

Hab. in foliis *Barringtoniae* acutangulae (Lecythidaceae), Dacca, Indiae or. (A. SOM). — *M. amphitrichae* affinis, sed hyphopodiis diversa.

99. *Meliola Barringtoniae* H. S. Yates, Philipp. Journ. Sc. Manila XII 4441

(1917), p. 363. — Epiphylla, maculas orbiculares 2-4 mm. diam., saepe confluentes, atrae; mycelio ex hyphis paucis flexuosis radiantibus irregulariter ramosis brunneis septatis 10 μ latis composito; hyphopodiis capitatis numerosis, plerumque oppositis, vel alternantibus, cellula superiore globosa 12-14 μ lata; cellula inferiore 5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis, 12 μ latis; setis myceliis numerosis, atris, opacis, validis, 200-300 \times 12-18, erectis, rectis vel leniter curvatis, acutis; peritheciis globosis, atris, opacis, tuberculatis, 140-200 μ diam.; ascis ellipsoideis, 4-sporis, evanescentibus, 50-60 \times 18-22; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, 40-50 \times 14-18.

Hab. in foliis *Barringtoniae luzonensis* (Lecythidaceae), Cavite Prov. Luzon, ins. Philipp. (RAMOS et DEROU).

100. *Meliola Andirae* Earle — Syll. XXII p. 46 — var. *Puttemansii* G. 4442

Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 1918, p. 229, tab. 51 (ad int., sine diagn.).

Hab. in foliis *Andirae* sp. (Leguminosae), San Paulo, Mattos da Serra da Cantareira, Brasilia (PUTTEMANS, in Putt. Fungi S. Paulens. 234).

101. *Meliola Bauhiniae* H. S. Yates, The Philipp. Journ. of Sc., Bot. 4443

13., 1918, p. 365. — Hypophylla, plagulas atras, velutinas, orbiculares, 3-6 mm. diam. efformans; mycelio ex hyphis intertextis ramosis anastomosantibus castaneo-brunneis 4-5 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus, vel unilateralibus, cellula superiore subglobosa, 12-13 μ diam., cellula inferiore 5-8 μ longa; hyphopodiis mucronatis paucis, usque ad 20-25 μ longis; setis mycelicis numerosissimis, rectis, erectis, simplicibus, ad apicem subacutis, atris, tota longitudine opacis, 200-250 μ longis, 8 μ cr.; peritheciis sparsis, 170-200 μ diam., globosis, tuberculatis, atris, opacis, astomis; ascis bisporis, ellipsoideis, 40-45 \times 20-25; sporidiis cylindraceis, 4-septatis, ad septa constrictis, utrinque late rotundatis, brunneis, 40 \times 12-15.

Hab. ad folia *Bauhiniae* sp. (Leguminosae), Llocos Norte Prov., Luzon, Ins. Philipp. (ROMANOS).

102. *Meliola cylindrophora* Rehm, Ascom. Philippin. I in Philipp. Journ. 4444

of Sc. VIII, 1913, p. 181 et ap. Sydow, Enum. Philipp. Fungi II, in l. c. p. 480. — Mycelio epiphylo, rarius hypophyllo, maculas minutas 1-4 mm. latas aegre conspicuas formante, laxo, radiante, ex hyphis longiusculis, rectis, ramosis, fuscis, 7-8 μ latis, septatis composito; hyphopodiis capitatis numerosissimis, plerumque perfecte oppositis, cylindraceis, fere semper rectis et aequalibus, apice late rotundatis, 11-16 \times 8-9, bicellularibus, cellula basali brevissima subinde vix conspicua; hyphopodiis mucronatis rarioribus usque ad 21 μ longis; setis mycelicis paucis, erectis, rectis, ad basim geniculatis, simplicibus, septatis, inferne subopacis, apice dilutioribus et acutiusculis, 150-340 \times 7-8; peritheciis paucis vel solitariis in quaque macula, globosis, late umbilicatis, 120-170 μ diam.; ascis plerumque bisporis, ovatis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, 36-40 \times 15-17, fuscis.

Hab. in foliis vivis *Caesalpiniae nugae* (Leguminosae), Luzon, ins. Philipp. (MERRILL).

103. *Meliola crenatissima* Syd., Ann. Mycol. 14., 1916, p. 77, fig. 2. — 4445

Epiphylla, plagulas orbiculares minutas 2-4 mm. diam. griseolas tenues formans; mycelio radiante, dense adpresso, ex hyphis plus minus distincte rectangulariter ramosis fuscis 7-8 μ crassis composito; hyphopodiis capitatis numerosis, plerumque alternantibus,

18-26 μ longis, cellula superiore globosa usque ovata 11-14 μ lata, inferiore brevi; hyphopodiis mucronatis non visis, setis mycelicis sat numerosis, erectis, rectis, dilute brunneis usque castaneo-brunneis sed tota longitudine pellucidis, 250-330 \times 7-10, apicem versus valde crenatis, (denticulis brevissimis usque longioribus et tunc 3.5 μ longis semper obtusis); peritheciis paucis in quaque plagula, globosis, astomis, 130-150 μ diam.; ascis 2-3 sporis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, parum constrictis, sordide brunneis, 32-40 \times 10-14.

Hab. in foliis *Calopogonii caerulei* (Leguminosae), Seringal Auristella, Rio Acre, Peruviae (E. ULE).

104. *Meliola aethiops* Sacc., Notae Mycol. XXIV p. 3 (Bull. Orto bot. 4446 Nap., 1918). — Coloniis epiphyllis, gregariis, subcircularibus, 2-3 mm. latis, interdum confluentibus, nigris, velutinis; mycelio radianti, fuligineo ramoso, hyphopodiis ovatis, conformibus, bilocularibus, 12-15 \times 8, praedito, setulisque filiformibus, simplicibus, obtusulis, septatis, fuligineis, 170 \times 7, interspersis; peritheciis globosis, astomis, colliculosis, nigris, 145 μ diam.; ascis ovoideis, plerumque 2-sporis; sporidiis oblongis, constricto-4 septatis, 32 \times 12, fuligineis.

Hab. in foliis vivis *Cassiae Fistulae* (Leguminosae), in Horto bot. Singapore (BAKER). — Pulchella species in planta medicinali, tam obvia, nondum indicata.

105. *Meliola toruloidea* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4447 II, 1916, p. 493, fig. 21. — Coloniis amphigenis, in hypophyllo magis copiosis, circularibus, 1-4 mm. diam.; mycelio atro densiuscule reticulato, ramis oppositis vel alternis 7 μ diam., leniter undulatis; hyphopodiis capitatis alternis, non crebris, uno pro cellula, cellulis 20 μ circ. longis; cellula capitata piriformi 20 \times 14, basilari brevissima, 5-6 μ ; hyphop. mucronatis oppositis, phialiformibus; setis mycelialibus nullis, perithecialibus paucis vel copiosis, saepe 30-40, sparsis, valde uncinatis vel spiraliter incurvis, 70 \times 7-8, atris; peritheciis juvenilibus non radiatis, 170 μ diam., ob papillulas rotundatas leniter scabris; ascis mox evanidis; sporidiis 4-septatis, brunneolis, constrictis, obtusis, 34 \times 16.

Hab. in foliis *Cassiae* et *Ingae* (Leguminosae), Porto Rico.

106. *Meliola chamaecristicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 494, fig. 24. — Coloniis epiphyllis, circularibus, 1-2 mm. diam., mycelio atro, sat dense reticulato, 7 μ crasso; hyphopodiis capitatis gracilibus, alternis, non crebris, 1 pro cellula,

cellulis circ. 14-17 μ longis, cellula capitata ovoidea 14 \times 10, basiliari 3 μ longa; hyphopodiis mucronatis alternis vel oppositis, ampulliformibus, 14-16 \times 6; setis mycelialibus nullis, perithecialibus paucis, rectis vel leniter curvatis, 80 \times 4, apice obtusis, ubique fuscis; peritheciis 170 μ diam., papillis rotundatis scabris; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 34 \times 14.

Hab. in foliis *Chamaecristae granulatae* (Leguminosae), Mona Island, Porto Rico. — A caeteris speciebus proximis differt setis valde gracilibus.

107. *Meliola abrupta* Syd., Ann. Mycol. 15., 1917, p. 181. — Amphigena, 4449
saepe autem tantum hypophylla vel epiphylla, plagulas tenues arachnoideas minutas vel confluyendo majores (usque 1 cm. diam.) saepe irregulares formans; mycelium ex hyphis 6-8 μ crassis rectangulariter ramosis fuscis septatis compositum; hyphopodia capitata numerosa, opposita vel alternantia, 13-20 μ longa, cellula superiore ovata, subglobosa vel piriformi 9-11 μ lata, inferiore minuta; hyphopodia mucronata etiam numerosa, opposita vel alternantia, pallidiora, inferne globulosa et ventricosa, superne abrupte in collum longum angustum cylindraceum producta, 20-24 μ longa, inferne 8-9 μ lata; setae mycelicae modice copiosae, simplices, rectae, plerumque tota longitudine opacae, ad apicem acutae, 200-400 μ longae, ad basim 9-11 μ latae; perithecia laxè aggregata, globosa, in sicco collapsa, 110-160 μ diam., levia; ascis 2-3-sporis; sporae cylindraceae, utrimque rotundatae, 4-septatae, constrictae, fuscae, 35-42 \times 10-13.

Hab. in foliis *Derridis diadelphae* et *Derridis spec.* (Leguminosae), prov. Rizal, Luzon, Ins. Philipp. (M. RAMOS).

108. *Meliola Derridis* H. S. Yates, The Philipp. Journ. of Sc. Bot. 13., 4450
1918, p. 368. — Epiphylla, plagulas atras, orbiculares 3-5 mm. diam., vel confluentes et subinde totam folii superficiem obtegentes efformans; mycelio radiante, ex hyphis fuscis anastomosantibus 6-7 μ crassis composito; ramis plerumque oppositis; hyphopodiis capitatis numerosis, alternantibus, cellula superiore rotundata 10-12 μ diam., cellula inferiore 5 μ longa; hyphopodiis mucronatis numerosis, oppositis ampulliformibus, usque ad 20-25 μ longis; setis mycelicis numerosis, erectis, rectis vel curvatis, 300-400 μ longis, 7-8 μ latis, castaneo-brunneis, subopacis, apicibus obtusis; peritheciis paucis, globosis, atris, 125-150 μ diam.; ascis non visis; sporidiis 4-septatis, oblongis, utrimque rotundatis, obscure fuscis,

30-35 \times 11-13, ad septa constrictis.

Hab. ad folia *Derridis* (Leguminosae), Burgos, Prov. Llocos Norte, Luzon, Ins. Philipp. (RAMOS). — Verisimiliter eadem est ac *Mel. abrupta*.

109. *Meliola bicornis* Wint. — Syll. IX p. 422. — var. *heterotricha* Spe- 4451
 gaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23, 1919, Extr. p. 87. — A typo differt subiculo hyphis obscurioribus apice tantum pellucidis, acutis, nonnullis tantum bidenticulatis; hyphopodiis plerumque alternis variabilibus, aliis globosis sessilibus v. pedicellatis, aliis expansis, apiculis ampullaeformibus; peritheciis globosis 129-180 μ diam. papillosulis, sporidiis 4-septatis, cylindraceutis 34 \times 10, loculis apicalibus subhemisphaericis. — *Hab.* in foliis *Desmodii incani* (Leguminosae), prope Apiahy, America austr. (J. PUIGGARI). — Var. *Calopogonii* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 532. — A typo differt setis rigidioribus, uniformiter minute denticulatis, nec non hyphopodiis capitatis paullo latioribus. — *Hab.* in foliis *Calopogonii orthocarp*i (Leguminosae), Mayaguez et Aguada, Porto Rico. Var. *Galactiae* Stev., loc. cit. p. 533. — Hyphopodiis capitatis latis, plerumque etiam setis divisas a typo satis differt. — *Hab.* in foliis *Galactiae dubiae* (Leguminosae), Rio Tanama, Porto Rico. Var. *Milletiae* Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 94. — A tipo recedit setis mycelicis pallidis non opacis, ad apicem verrucosis v. 2-3-dentatis, 350-540 \times 7-9. — *Hab.* in pagina superiore foliorum *Milletiae* sp. (Leguminosae), in valle Mobi Lukunga, Congo Africae trop. (VANDERYST).
110. *Meliola heterocephala* Syd., Ann. Mycol. 14., 1916, p. 356, fig. — 4452
 Epiphylla, plagulas minutas 1-3 mm. diam. tenues arachnoideas formans; mycelio plerumque parco, ex hyphis fuscis 5-8 μ crassis breviter ramosis anastomosantibus formato; hyphopodiis capitatis sat numerosis, alternantibus 12-20 μ longis, cellula superiore semper rotundata integra subglobosa vel ovata, 9-12 μ lata, inferiore brevi; hyphopodiis mucronatis rarioribus, oppositis; setis tantum ad basim paritheciorum evolutis, modice numerosis, 150-300 μ longis, 8-9 μ latis, ad apicem plerumque dilatatis (usque 12 μ), obscure brunneis, subopacis vel sursum subinde subpellucidis, ad apicem plerumque irregulariter incurvo-uncinatis et denticulos plus minus numerosos variae longitudinis gerentibus; peritheciis paucis in quaque plagula, globosis, in sicco collapsis, 120-160 μ diam., vix vel leniter tuberculatis, astomis; ascis 2-3-sporis, fugacibus, 35-40

≈ 18-24; sporidiis cylindræis, sordide brunneis, 4-septatis non vel leniter constrictis, utrinque rotundatis, 26-34 ≈ 9-11, cellulis aequalibus.

Hab. in foliis *Desmodii* sp. (Leguminosae), M. Maquiling, ins. Philipp. (C. F. BAKER).

111. *Meliola Zollingeri* Gail. — Syll. XI, p. 268 — var. *minor* Beeli, 4453
Bull. Jard. Bot. État Bruxelles v. 7., 1920, p. 100. — A typo differt: maculis non velutinis, peritheciis minoribus, 150-160, setis mycelicis plerumque 2-4 furcatis, leniter torulosis minoribus 220-250 ≈ 6-7; hyphopodiis capitatis alternis, 14 ≈ 12; sporidiis minoribus 36-39 ≈ 10-12.

Hab. in foliis *Desmodii* sp. (Leguminosae), Kikwit, Bokala, Congo, Africae trop. (VANDERYST).

112. *Meliola desmodiicola* Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 4454
1920, p. 94. — Epiphylla; maculas atras irregulares, crustaceas 1-3 mm. diam. efformans, hyphis fuscis plus v. minus sinuosis, densis, 30-40 ≈ 8; hyphopodiis capitatis oppositis v. unilateralibus, cellula apicali subglobosa 10-12 μ, cell. bas. brevi 4-6 ≈ 8; hyphop. mucronatis, numerosis suboppositis; peritheciis verruculosi, fusco-atris, subostiolatis 150-200 μ; setis mycelicis sparsis, paucis, brunneis pellucidis, septatis, simplicibus, rectis, apice obtusis et leniter inflatis 280-300 ≈ 7; ascis evanescentibus; sporidiis 4-septatis, obtusis, ad septa constrictulis, cylindræis, rectis curvulisve 37-40 ≈ 10-13.

Hab. in pag. sup. foliorum *Desmodii* sp. (Leguminosae), Wombali, Congo, Africae trop. (VANDERYST).

113. *Meliola Erythrinae* Syd., Ann. Mycol. 15., 1917, p. 185. — Epiphylla; 4455
plagulas primitus minutas 2-3 mm. diam. tenues dein plus minus confluentes effusas et saepe totum folium occupantes formans; mycelium laxum, ex hyphis longiusculis pellucide brunneis 7-9 μ latis septatis (articulis 25-40 μ longis) laxè ramosis subrectis vel flexuosis compositum; hyphopodia capitata numerosa, alternantia piri-formia, integra, 17-22 μ longa, cellula superiore ovata vel globulosa 12-14 μ lata, inferiore brevi, hyphopodia mucronata opposita, usque 22 μ longa, basi 7-9 μ lata; setae mycelicae paucae, rectae vel parum curvatae, simplices, apice obtusae, 300-500 μ longae, basi 9-10 μ latae, tota longitudine vel saltem in superiore parte pellucidæ; perithecia laxè gregaria, globosa, 100-160 μ diam., astoma, ex cellulis 8-10 μ diam. composita, cellulis periphericis multo majoribus conoideis vel papilliformiter elongatis usque 30 μ longis basi ca. 20-24 μ latis; asci 2-4-spори; sporae oblongae, utrinque rotun-

datae, 4-septatae, leniter constrictae brunneae, 35-42 \times 11-15.

Hab. in foliis *Erythrinae indicae* (Leguminosae), Laguna, Luzon, Ins. Philipp. (M. RAMOS).

114. *Meliola Gleditschiae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4456
Buenos Aires, XXIII p. 41 (1912). — Caespitulis amphigenis, primo discretis, 1-3 mm. diam., dein confluentibus et saepe totum folium obtegentibus, parce setulosis, facile deciduis; hyphis repentibus densiuscule intertextis, sat flexuosis, obscure fuligineis, 10 μ cr.; hyphopodiis densiusculis, antrorsis, non adpressis, saepius clavulatis alternisque, bicellularibus, 30 \times 12-15, raro lageniformibus et oppositis, semper fuligineo-pellucidis; setulis praecipue circa perithecia evolutis, erectis, 200-300 \times 10-12, rectiusculis, apice obtusiusculis et saepe conidium cylindraceo-fusioideum, 4-septatum, 30-35 \times 6-7, fuligineum gerentibus; peritheciis subglobosis, 200-250 μ diam., coriacellis, glabris, non collabescentibus, astomis; ascis ellipsoideis, 65 \times 35-40, bisporis, mox diffluentibus; sporidiis subcylindraceis, utrinque truncatis, 4-septatis, vix constrictis, e latere tenuiter compressis, 50 \times 20-22 \times 17-18, loculo centrali paullo majore, fuligineis.

Hab. in foliis vivis *Gleditschiae amorphoidis* (Leguminosae), in silvis prope Puerto Leon, Misiones: Argentina.

115. *Meliola Gliricidiae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 550. — 4457
Epiphylla, plagulas parum perspicuas orbiculares 0,5-1 cm. diam. formans; mycelio radiante, fere rectangulariter ramoso, matrici adpresso, ex hyphis longiusculis fuscis 6-9 μ cr. composito; hyphopodiis capitatis numerosis, 15-18 μ long., cellula superiore globosa v. ovata 11-14 μ diam., basali brevissima, integris alternantibus v. uniliteralibus; hyphopodiis mucronatis raris, oppositis; setis mycelicis modice numerosis, rigidis, erectis, simplicibus, apice acutis, tota longitudine opacis, 120-160 \times 6-7; peritheciis sparsis, globosis, astomis, parum tuberculatis, 100-150 μ diam.; ascis 2-3-sporis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, parum constrictis, fuscis, 32-36 \times 12-14.

Hab. in foliis *Gliricidiae sepium* (Leguminosae), prov. Rizal, Ins. Philippin. (M. RAMOS).

116. *Meliola bataanensis* H. et P. Sydow, Ann. Mycol. XII, 1914, 4458
p. 551. — Mycelio epiphylo, tenui, subarachnoideo, plagulas parum distinctas 2-10 mm. diam., saepe confluentes et magnam folii partem occupantes formante; hyphis rectis, ramosis, remote septatis, fuscis, 7-8 μ latis; hyphopodiis capitatis alternantibus sat

numerosis, rectis v. rarius apice leniter curvatis, crasse cylindraceis, bicellularibus, obtusis, $12-18 \times 8-10$, cellula basali brevi; hyphopodiis mucronatis oppositis, rarioribus; setis mycelicis rectis, erectis, apice acutissimis, opacis, $175-420 \times 7-9$; peritheciis dispersis, globulosis, $130-160 \mu$ diam., verruculosi, contextu ex cellulis $8-10 \mu$ diam., in sicco collapsis; ascis 2-4 sporis, ovatis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, constrictis, fuscis, $35-38 \times 12-14$.

Hab. in foliis *Millettiæ* sp. (Leguminosae), Lamao prov. Bataan Luzon, Ins. Philippin. (E. D. MERRILL).

117. *Meliola Pterocarpiæ* H. S. Yates, F. from Brit. N. Borneo, in *Phyllo- 4459*
lipp. Journ. of Sc. Bot., v. 13., 1918, p. 235. — Maculis epiphyllis, subpelliculosis, atris, orbicularibus vel suborbicularibus, 2 ad 6 mm. diametro, vel confluentibus et magnam partem folii occupantibus, mycelio tenuissimo, ex hyphis parce ramosis brunneis $6-8 \mu$ crassis composito; ramis plerumque oppositis; hyphopodiis capitatis numerosis, alternantibus, cellula superiore ovata, $11-13 \times 19-12$, cellula inferiore 5μ longa; hyphopodiis mucronatis paucissimis, ampulliformibus, usque ad 18μ longis; setis mycelicis validis, rectis, erectis, atris, opacis, simplicibus, acutis, $200 \times 10-12$, peritheciis numerosis, globosis, atris, opacis, $125-140 \mu$ diametro; ascis ovatis, bisporis, mox diffluentibus; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, $38-40 \times 12-15$.

Hab. in foliis *Pterocarpi indici* (Leguminosae), Tenom in ins. Borneo bor. — Socium *Phaeodothiopsis Pterocarpi* Yat.

118. *Meliola banosensis* Syd., Ann. Mycol. 14., 1916, p. 356. — Epiphylla 4460
vel petiolicola, plagulas primitus minutas dein confluentes et plus minusve effusas leniter velutinas atras formans; mycelio parco, effuso, ex hyphis fuscis $7-9 \mu$ crassis ramosis septatis (articulis $10-25 \mu$ longis) formato; hyphopodiis capitatis modice numerosis, alternantibus, bicellularibus, cellula superiore globulosa vel depressoglobosa integra $10-13 \mu$ alta $10-15 \mu$ lata, cellula inferiore usque 8μ alta saepe brevissima vel subnulla; hyphopodiis mucronatis raris; setis mycelicis copiosis, rectis vel subrectis, $300-700 \mu$ longis, basi $9-10 \mu$ latis, ad apicem acutis, tota longitudine opacis, 2-4-septatis; peritheciis laxe gregariis globosis, $130-160 \mu$ diam., atris, poro minuto pertusis, vix tuberculatis, in sicco profunde collapsis, contextu ex cellulis $\approx 10 \mu$ diam. composito; ascis ovatis, fugacibus, $40-60 \times 22-28$, 2-4-sporis; sporidiis cylindraceis, utrin-

que obtusis, rectis, 4-septatis, non vel vix constrictis, sordide brunneis, $32-86 \times 10-15$, loculis omnibus aequalibus.

Hab. in foliis *Puerariae* sp. (Leguminosae), Los Baños, ins. Philipp. (C. F. BAKER).

119. *Meliola Rudolphiae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4461

II, 1916, p. 511, fig. 41. — Mycelio semper epiphylllo, atro, undulato maculas circulares efformante vel irregulariter diffuso; setis mycelialibus copiosis, longis, 400μ , atris, attenuatis, septatis, acutis, simplicibus; hyphopodiis capitatis alternis, cellula basilari brevi, $3-6 \mu$, capitata irregulari, plerumque lateraliter incurva, 10×17 ; hyphopodiis ampulliformibus alternis, 21×7 ; peritheciis numerosis, racemose acervatis, atris, $150-170 \mu$ diam., depressiusculis, siccis collapsis, papillis brevibus scabris; ascis 4-sporis, 65×27 ; sporidiis 4-septatis, obscure brunneis, utrinque rotundatis, modice constrictis, $48-51 \times 17-20$.

Hab. in foliis *Rudolphiae volubilis* (Leguminosae), Porto Rico. — *M. Montagnei* affinis; differt colore, sporidiis, mycelii exiguitate et densitate.

120. *Meliola Schizolobii* Syd., Ann. Mycol. 14., 1916, p. 76. — Epiphylla, 4462

plagulas minutas $3-6$ mm. diam. tennes laxas griseolas formans, mycelio eximie radiante, matrici dense adpresso, rectangulariter ramoso, ex hyphis fuscis $6-7 \mu$ crassis composito; hyphopodiis capitatis numerosis, in longa serie oppositis, singulis unilateralibus, $11-18 \mu$ longis cellula superiore globulosa vel ovata $9-11 \mu$ lata, inferiore minuta vel minutissima saepe vix visibili, integris; hyphopodiis mucronatis non visis; peritheciis sparsis, globosis, astomis, $80-100 \mu$ diam.; setis mycelis sat numerosis, rectis vel fere rectis, rarius parum flexuosis, tota longitudine pellucidis, crasse tunicatis septatis, dilute fuscis usque fuscis, ad apicem saepe subhyalinis, apice obtusis vel breviter 2-4-furcatis (dentibus plerumque brevissimis $2-3 \mu$ longis, rarius longioribus usque 10μ); ascis non visis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, leniter constrictis, $26-30 \times 10-13$.

Hab. in foliis *Schizolobii excelsi* (Leguminosae), Serin-gal, S. Francisco, Rio Acre, Brasiliae (E. ULE).

121. *Meliola Tamarindi* P. et H. Syd., Ann. Mycol. X, 1912, p. 79. — 4463

Mycelio epiphylllo, subvelutino, atro, ex hyphis ramosis anastomosantibus dense intertextis $8-11 \mu$ cr. brunneis formato; hyphopodiis alternantibus, stipitatis, bicellularibus, cum stipite $15-30 \mu$ long. 10μ cr.; setis mycelii simplicibus, erectis, rectis, obscure brunneis,

usque 400 μ long. 7-10 μ cr.; peritheciis aggregatis, globosis, atris, tuberculatis, 175-250 μ diam., contextu ex cellulis 11-14 μ latis composito; ascis clavulatis 50-60 \times 20, 2-3-sporis; sporidiis oblongis, 4-septatis, constrictis, utrinque rotundatis, obscure brunneis, 36-44 \times 13-17.

Hab. in foliis *Tamarindi indicæ* (Leguminosae), pr. Manila, ins. Philippin. (E. D. MERBILL).

122. *Meliola Teramni* (Sacc.) Syd., Ann. Mycol. 15., 1917, p. 193, *M. nigro-rufescens* var. *Teramni* Sacc. in Atti Accad. Ven. Trent. Istr. X, 1917, p. 60. — Epiphylla, plagulas minutas 1-3 mm. diam. subinde confluentes tenues formans; mycelium ex hyphis toruloso-flexuosis brunneis 7-8,5 μ crassis ramosis anastomosantibusque septatis compositum; hyphopodia capitata numerosa, alternantia vel opposita, plerumque ovata, 16-22 μ longa, cellula superiore ovata vel subglobosa semper integra saepe recurvata 12-15 μ lata, cellula inferiore brevissima; hyphopodia mucronata etiam copiosa, opposita, lageniformia, 18-24 μ longa, subito in collum longiusculum producta, basi 7-8 μ lata; setae myceliales modice copiosae, rectae vel subrectae, 500-750 μ longae, basi 9-11 μ crassae, inferne opacae, superne semper pellucide brunneae, ad apicem late obtusae vel truncatae sive simplices, sive dentes 2-4 brevissimos vel longiores (2-15 μ longos), erectos gerentes; perithecia laxè gregaria, globosa, astoma, 120-170 μ diam., glabra; asci ovati, 40-48 \times 25-35, bi-trispori; sporae oblongo-cylindraceae, 4-septatae, vix vel leniter constrictae, brunneae, utrinque obtusae, 36-42 \times 11-15, cellulis aequalibus.

Hab. in foliis *Teramni uncinati* (Leguminosae), Los Baños, Laguna (O. F. BAKER), T. labialis, Kalinga Luzon, Ins. Philipp. (H. S. YATES).

123. *Meliola Castanha* Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 24. — Mycelio amoene radiato, plagulas 2-4 mm. latas circulares efformans. Hyphae 10-14 μ crassae, fuliginæo-brunneae, asperulogranulosae, typice (at inconstanter) oppositè ramosae, septis 40 μ distantibus. Hyphopodia capitata alterna, elongato-clavata, pedicellata, recta (rarius recurvata), integra, 30-32 μ longa, supra 12-16 μ lata; hyphopodia mucronata latiora, ampulliformia, collo recurvo. Setae myceliales nigrae, rectae, basi non vel vix brevissime geniculatae, basi 10 μ crassae, usque 500 μ longae, apice laetiores acutiusculae integrae vel obsolete lateraliter denticulatae. Perithecia in centro plagarum dense gregaria, globulosa, grosse verru-

cosa, atro-nitentia, 200-250 μ diam., astoma, glabra, cellulis polygoniis robustis 15-20 μ latis rubro-brunneis (extus polygonatiter prominentibus) contexta. Asci 2-3 spori, elliptici, 70-75 \times 42. Sporae 4-septatae, semper laete olivaceae, guttulis destitutae, cylindraceae, 56-68 \times 24-28, ad septa modice constrictae, cellulis aequalibus (extimis paulo majoribus).

Hab. epiphylla in foliis Leguminosae scandentis, vulgo « Castanha » dictae, S. Leopoldo, Brasiliae meridionalis.

124. *Meliola Smilacis* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4466 1916, p. 524. — Coloniae amphigenis sed in epiphylo magis copiosis, irregulariter circularibus, 2-4 mm. diam., mycelio modice contexto, non undulato, opposito ramoso; hyphopodiis capitatis alternis, oppositis vel unilateralibus, cellula capitata cylindraceo-subglobosa, 14 \times 11, basilari brevi, circ. 4 μ ; hyphopodiis mucronatis raris, conoideis, collo breviter attenuato, vel ampulliformibus, collo magis elongato; setis mycelialibus copiosis 500 μ circ. altis, sursum attenuatis, basi 10 μ cr., apice obtusis, raro bifidis, pallidis, basi opacis; setis vel appendicibus perithecialibus nullis; peritheciis 200 μ circ. diam., osciolo minutissimo praeditis; ascis mox evanidis, brevibus; sporidiis 4-septatis, leniter constrictis, utrinque obtusis, 15 \times 17.

Hab. in foliis *Smilacis* (Liliaceae), Porto Rico.

125. *Meliola Fagraeae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 549. — 4467 Hypophylla, plagulas aterrimas velutinas orbiculares $\frac{1}{2}$ \times 1 $\frac{1}{2}$ cm. diam. valde conspicuas formans; mycelio radiante, dense depresso, ex hyphis dense intertextis torulosis fuscis opacis 7-10 μ crassis composito; hyphopodiis capitatis numerosissimis, dense stipatis, ovato-oblongis, obtusis, bicellularibus, 18-26 \times 10-12; setis mycelicis numerosis, erectis, rectis, lanceolatis, apice acutis, tota longitudine opacis, 300-400 μ long. 8-10 μ latis; peritheciis sparsis, astomis, globosis, 130-160 μ diam.; ascis ovatis bisporis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, leniter constrictis, obscurè castaneo-brunneis, subopacis, 40-50 \times 16-21; mycelio conidiifero copiose evoluto *Helminthosporii* speciem sistente; hyphis fertilibus erectis, rectis v. parum flexuosis, laxè fasciculatis, plus minus toruloso contortis, 175-400 \times 6-9, fuliginèis, septatis (articulis 22-35 μ longis); conidiis acrogenis, fusoidèis, 3-4 septatis, totis 34-48 μ long., medio 7-10 μ latis, utrinque (praecipue ad apicem) attenuatis, fuliginèis.

Hab. in foliis *Fagraeae plumeriaefoliae* (Logania-

- ceae), Mt. Isarog prov. Camarines, Ins. Philippin. (M. RAMOS).
126. *Meliola catubigensis* H. S. Yates, Philipp. Journ. Sc. Manila, XII 4468 (1917) p. 363. — Amphigena, plerumque epiphylla, maculas atras, orbiculares, 5-10 mm. diam. vel confluentes et folii superficiem plus minusve continue obtegente, mycelio ex hyphis brunneis septatis ramosis 8-10 μ crassis composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore globosa vel ovata, 12 μ diam., inferiore 5 μ longa; hyphopodiis mucronatis paucis, plerumque oppositis, ampulliformibus, usque ad 15 μ longis; setis myceliis 250 μ longis, 8-10 μ latis, erectis, rectis vel leviter curvatis, inferne atris, opacis, apicem versus septatis, obscure brunneis, obtusis; peritheciis paucis, minutis, 60-80 μ diam., globosis obscure brunneis, subopacis, tuberculatis; ascis non visis; sporidiis 4-septatis, ad septa constrictis, cylindraceis, utrinque late rotundatis, brunneis, 30-34 μ longis 12-15 μ latis.

Hab. in foliis *Loranthi* sp. (Loranthaceae), Catubing Riv. Ins. Philipp. (RAMOS). — A *Mel. Loranthi* Gaill. diversa.

127. *Meliola arcuata* Doidge, Trans. R. Soc. South Afr. V p. 737 t. 66 4469 fig. 37. — Coloniis minutis velutinis, 1-2 mm. diam.; hyphis ramoso-sinuosis, septatis, brunneis, 10-11 μ cr., demum anastomotidis; hyphopodiis capitatis, alternis, breviter stipitatis 20-30 \times 10-11, cellula terminali ovoidea dentato-lobulata; hyphopodiis mucronatis paucis, oppositis, 14-18 \times 7-9; setis mycelialibus numerosis, simplicibus, arcuatis rarius subrectis, nigris, opacis, apice acutis, 115-150 \times 7-11; peritheciis nigris, granulosis, 115-150 μ diam.; ascis bisporis evanidis; sporidiis elliptico-oblongis, utrinque rotundatis, 4-septatis ad septa leniter constrictis, 50-54 \times 14-16.

Hab. ad caules *Visci* sp. (Loranthaceae), Kentami, Africae australis (PEGLER).

128. *Meliola Magnoliae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4470 1916, p. 523, fig. 50. — Coloniis hypophyllis, irregularibus, 3-20 mm. diam., atris; mycelio 7 μ cr. laxo reticulato contexto; hyphopodiis capitatis alternis vel irregularibus, 45 μ circ. inter se distantibus, cellula capitata cylindracea, recta vel curvula, quam pedicello valde crassiore, obtusa, cellula basilari 8 μ circ. longa; hyphopodiis mucronatis oppositis vel sparsis, subcylindraceis vel anguste ampulliformibus, 20 μ longis; setis perithecialibus nullis, mycelialibus paucis, 700 μ circ. longis, rectis vel leniter curvis, opacis, apice acutis, simplicibus vel, raro, breviter furcatis; peritheciis 200 μ diam., leniter scabris, non ostiolatis; ascis cito diffluentibus; spo-

ridiis 4-septatis, atro-brunneis, arcte constrictis, obtusis, 51×20 ,

Hab. in foliis *Magnoliae portoricensis* (Magnoliaceae), Monte Alegre. Porto Rico. — Ob hyphopodia haud perfecte evoluta, ramis mycelialibus brevibus subsimilia, species facile dignoscitur et primitiva in genere videtur.

129. *Meliola diplochaeta* Syd. in Leaflets of Philipp. Bot. V (1912) 4471

p. 1536. — Mycelio hypophyllo, plagulas aterrimas magnas discoideas 1-2 cm. latas velutinas efformante, ex hyphis fuscis laxiuscule ramosis $7-10 \mu$ cr. composito; hyphopodiis mucronatis plerumque alternantibus, $24-28 \mu$ longis; hyphopodiis capitatis clavatis, rectis vel curvulis, superne subinde irregulariter leniterque lobatis, 2-3-cellularibus, $20-35 \times 10-15$; setis mycelicis numerosissimis, praelongis, rectis vel subrectis, rigidulis, 1-1,75 mm. longis, $6-11 \mu$ cr., prope basim abrupte geniculatis, opacis, apice 2-pluries inciso-furcatis vel denticulatis, dentibus plerumque brevissimis, raro haud furcatis; setis perithecialibus paucis, multo brevioribus, $250-300 \mu$ tantum longis, etiam ad apicem furcatis: peritheciis in mycelio sparsis, globosis, in sicco collapsis, atris, $90-140 \mu$ diam., rugulosis; ascis bisporis, ovatis, mox diffluentibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, $50-56 \times 22-24$.

Hab. in foliis vetustis *Talaumae villarianae* (Magnoliaceae), Puerto Princessa, Palawan, ins. Philipp. — Ob setas myceliales perlongas, peritheciales contra multo breviores species peculiaris.

130. *Meliola rectangularis* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4472

II, 1916, p. 495, fig. 25. — Coloniae epiphyllis, circularibus vel irregularibus, 1-10 mm. diam.; mycelio ex hyphis 7μ diam., ramis oppositis typice rectangularibus praeditis, laxo contextis efformato; hyphopodiis capitatis alternis, circ. 25μ inter se distantibus, cylindraceis vel ovoideis, cellula capitata 17×10 , basilari $3-5 \mu$ longa vix angustiore, hyphopodiis mucronatis alternis vel oppositis, e conoideis subampulliformibus, 20×6 ; rostro tenui; setis mycelialibus nullis, perithecialibus paucis, brevibus, 80μ vel minus, opacis, apice obtusis, rectis vel leniter curvis; peritheciis 170μ diam.; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 38×14 .

Hab. in foliis *Banisteriae laurifoliae* (Malpighiaceae) et *Coccolobae laurifoliae* (Polygonaceae), Porto Rico.

131. *Meliola Byrsonimae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4473

II, p. 517. — Coloniis epiphyllis circularibus vel irregularibus, 2-5 mm. diam.; mycelio ex hyphis laxè reticulato-contextis, 10 μ diam. efformato; hyphopodiis capitatis alternis, usque ad 1.0 μ distantibus, cylindræis, 20 \times 17, sæpe irregularibus vel curvis, cellula basilari 3-5 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus, 24 μ circ. longis; setis perithecialibus nullis, mycelialibus parçissimis, sparsis, rectis vel leniter curvis, 1000 μ longis, ubique fuscis, apice obtusis vel acutis; peritheciis 150-160 μ diam., levibus, in juventute areola myceliali cinctis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 54 \times 18.

Hab. in foliis *Byrsonimae lucidae* (Malpighiaceae), Guayanilla, Porto Rico. — *M. amphitrichae*, *ambiguae* et *corallinae* congnata sed distincta.

132. *Meliola crenato-turcata* Syd., Ann. Mycol. 14., 1916, p. 77. — Hypo- 4474

phylla, plagulas effusas irregulares tenues usque 2 cm. longas confluentes formans; mycelio radiante, dense adpresso, ex hyphis plus minus distincte rectangulariter ramosis fuscis 8-9 μ crassis composito; hyphopodiis capitatis numerosis, plerumque alternantibus, crasse cylindræis, rectis vel curvatis, 18-24 μ longis, 10 μ latis, cellula basali minuta; setis mycelicis sat numerosis, erectis, rectis, obscure castaneo-brunneis, opacis, rarius superne subpellucidis, 300-350 \times 8-10, apicem versus mox tantum crenatis, mox denticulatis vel potius 2-4 furcatis (dentibus usque 12 μ longis); peritheciis sparsis, globosis, astomis, 150-180 μ diam.; ascis 2-3-sporis; sporidiis crasse cylindræis, utrinque obtusis 4-septatis, constrictis, 35-40 \times 13-17.

Hab. in foliis *Malpighiaceae*, Seringal S. Francisco, Rio Acre, Brasiliae (E. ULE). — *M. crenatissimae* affinis.

133. *Meliola Triumphettæ* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4475

II, 1916, p. 498. — Coloniis epiphyllis, punctiformibus, 1-3 mm. diam.; mycelio ex hyphis sinuosis, irregulariter ramosis, 6 μ cr., dense reticulato-intertextis composito; hyphopodiis capitatis minutis, alternis vel irregulariter distributis, 17-50 μ circ. inter se distantibus, cellula capitata globuloso-piriformi, 14 μ diam., basilari brevi; hyphopodiis mucronatis paucis, sparsis, alternis vel oppositis, phialiformibus, circ. 20 \times 7; setis mycelialibus nullis, perithecialibus paucis, 1-5, interdum sinuosis, 70-85 \times 6, flavis, pellucidis, apice obtusis; peritheciis irregulariter globosis, 85-140 μ diam., scabris, translucidis, papillis conoideis conspersis; ascis mox evanidis;

sporidiis 4-septatis, brunneis, constrictis, obtusis, $34-41 \times 10-14$.

Hab. in foliis Hibisci tiliacei (Malvaceae) nec non Triumfettae semitrilobae (Tiliaceae), Porto Rico. — Specimina in Hibisco, mycelio magis undulato et colonias latiores efformante, setis perithecialibus quoad numerum magis variabilibus, a typo paullo recedunt. — Var. *Vanderystii* Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 100. — A typo differt setis perithecii majoribus, $100 \times 8-10$, leniter torulosis, distincte uncinatis. *Hab.* in foliis Triumfettae sp. (Tiliaceae), Kikwit. Congo Africae trop. (VANDERYST).

134. *Meliola Sidae* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 391. — *M. microspora* Rehm, Ascomyc. Philipp. I, loc. cit. p. 181, non Pat. et Gaill. — Mycelio plagulas arachnoideas, orbiculares, tenuissimas, nigrescentes, discretas, 1-3 mm. latas, raro confluentes, epiphyllas, in hypophyllo interdum crustaceas formante; hyphis centrifugis, subramosis, fuscis, $6-7 \mu$ cr., hyphopodiis capitatis plerumque alternantibus, 2-cellularibus, apice ovoideis, interdum truncatis vel sublobulatis, $12-15 \times 10-12$, hyphopodiis mucronatis plurimis oppositis, $15 \times 6-9$ obsessis; peritheciis sparsis, globulosis, astomis, atris, verruculosi, 120μ latis, ad basim setis singulis erectis, apice acutatis, septatis, obscure fuscis, $200 \times 7-8$, aliis erectis apice obtusis et dilutioribus, septatis, $60-100 \times 7-8$ instructis; ascis ellipsoideis, 4-sporis, 30×15 ; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa subconstrictis, flavo-fuscis, $25-27 \times 9-10$.

Hab. ad folia Sidae javensis (Malvaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — A *M. microspora* Pat. et Gaill. differt setis perithecorum biformibus.

135. *Meliola Marcgraviae* L. R. Tehon, Bot. Gazette 67., 1919 p. 506. — 4477
Colonii epiphyllis, irregularibus 3-10 mm diam., oppositae ramosae, hyphis e obscuris opacis $5-6 \mu$ diam.; hyphopodiis capitatis alternis, 32μ inter se remotis, cellula apicali globosa 11μ diam., basali brevi 5μ longa; hyphopodiis mucronatis plerumque oppositis, sed frequenter etiam alternis, phyalaeformibus, $12-14 \mu$ long., setis mycelicis et perithecialibus nullis; peritheciis sparsis, parvis, $65-75 \mu$ diam.; ascis mox evanidis; sporidiis 4-septatis, pallide brunneis, cylindraceis, ad septa constrictulis, 40×15 .

Hab. in foliis Marcgraviae rectiflorae (Marcgraviaceae), Porto Rico.

136. *Meliola Memecyli* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 198; 4478

XV, 1917, p. 189. — *Amphigena*, plagulas primitus orbiculares 3-5 mm. diam. dein confluentes et irregulares atras leniter velutinas formans; mycelio obscure brunneo, ex hyphis densiuscule septatis 9-11 μ latis breviter ramosis composito; hyphopodiis capitatis sat numerosis, semper alternantibus, oblongis v. crasse cylindraceis, 20-28 μ long. 10-15 μ latis, cellula superiore rotundata, inferiore plerumque brevi; hyphopodiis mucronatis non visis; setis mycelicis numerosis; rigidis, rectis v. subrectis, atris, opacis, septatis, ad apicem quandoque 2-3 ramosis plerumque paullo dilutioribus, 600-1000 μ long. inferne 9-12 μ latis; peritheciis laxe gregariis, atris, rugosis, astomis, in sicco collapsis, 160-250 μ diam.; ascis ovatis, bisporis, 50-65 \times 32-38; sporidiis ellipsoideis v. subcylindraceis, aut oblongis, utrinque rotundatis, 4-septatis et constrictis, obscure brunneis, 49-54 \times 19-24.

Hab. in foliis *Memecyli edulis* (Melastomataceæ), Dapoli Indiae or. (S. L. AJREKAR) et *M. lanceolati* in Ins. Philippinis (RAMOS). — *Mel. amphitrichae* Fr. proxima, sed differt praecipue setulis mycelialibus multo longioribus

137. *Meliola affinis* Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1921. — 4479

Mycelio hypophyllo, vix maculiformi, subeffuso, laxo, ex hyphis ramosis anastomosantibus, atris, opacis, 8-11 μ latis composito; hyphopodiis mucronatis raris, oppositis vel alternantibus, 18-26 μ longis; hyphopodiis capitatis magis numerosis, alternis, rectis vel curvatis, bicellularibus, 22-30 \times 8-11; setis mycelicis rectis, erectis, rigidis, opacis, 300-700 \times 10-15, biformibus; aliis simplicibus apice obtusis, aliis apice 2-3-furcatis, dentibus usque ad 10 μ longis; peritheciis paucis, globosis, rugulosis, 180-230 μ diam.; ascis ovatis, bisporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, fuscis, 38-44 \times 13-16.

Hab. in foliis vetustis *Memecyli urdanetensis* (Melastomataceæ), Uabadbaran, Mt. Urdaneta, Mindanao, ins. Philipp. — *M. Mangiferae* Earle valde affinis; differt praecipue sporidiis minoribus et constrictis.

138. *Meliola Miconiae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4480

1916, p. 498, fig. 29. — Coloniis epiphyllis circularibus, 2-5 mm. diam., nitide limitatis atris, levibus; mycelio dense intertexto, ex hyphis 7 μ cr. plerumque opposite ramosis; hyphopodiis capitatis alternis vel irregularibus, haud crebris, 30 μ circ. inter se distantibus, cellula capitata piriformi, irregulari angulosaque, saepe curva, basilari 7-9 μ longa; hyphopodiis mucronatis non visis; setis my-

celialibus nullis, perithecialibus inconspicuis, paucis, 3-10, rectis vel leniter curvis, vel etiam convolutis, obtusis, $30-85 \times 10$; peritheciis $170-225 \mu$ diam., tenuiter papillulato-scabris; ascis tetra. sporis, cito diffluentibus; sporidiis 4 septatis, brunneis, leniter constrictis, obtusis, $44-47 \times 17$.

Hab. in foliis *Miconiae prasinae* (Melastomataceae), Las Piedras et Las Marias, Porto Rico.

139. *Meliola miconiicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4481 II, 1916, p. 491, fig. 19. — Coloniae hypophyllis, irregularibus, diffusis, 5-20 mm. diam.; mycelio laxissime reticulato ex hyphis leniter undulatis, 6μ diam., ramis plerumque oppositis praeditis constituto; hyphopodiis capitatis minutis, alternis vel irregulariter distributis, inter se valde distantibus, circ. 75μ , cellula capitata ovoidea vel piriformi, interdum paullo irregulari, 17×14 , basilari $4-10 \mu$ longa; hyphopodiis mucronatis paucis, sparsis, plerumque oppositis, phialiformibus, angustis, curvulis, 17μ circ. longis; setis mycelialibus nullis, perithecialibus paucis, 3-10, basilaribus, plus minusve curvatis, $30-85 \times 7$, apice obtusis, fuscis; peritheciis 135μ diam., papillis rotundatis asperatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, constrictis, obtusis, $35-38 \times 11$.

Hab. in foliis *Miconiae Sintenisii* (Melastomataceae), El Alto de la Bandera, Porto Rico. — Mycelio sparso et hyphopodiis remotissimis distincta species.

140. *Meliola Aglaiae* Syd., Philipp. Journ. of Sc., v. 9., Sect. C., n. 2., 4482 1914, p. 159. — Amphigena, plagulas orbiculares minutas 2-4 mm. latas tenuissimas atras formans; mycelio hyphis radiantibus laxiuscule ramosis septatis fuscis $6-8 \mu$ crassis composito; hyphopodiis capitatis sat numerosis, solitariis v. saepius in longa serie perfecte oppositis bicellularibus, oblongis, $12-16 \mu$ longis, $7-8,5 \mu$ latis, cellula basali brevi vel brevissima, superiore late rotundata; hyphopodiis mucronatis rarioribus, usque 18μ longis; setis mycelicis numerosis, subrectis vel lenissime falcato-curvatis, $350-700 \mu$ longis, inferne $7-9 \mu$ crassis ad apicem acutis, inferne opacis, superne dilutioribus et pellucidis, septatis; peritheciis paucis in quaque plaga, globosis, $120-150 \mu$ diam., vix verrucosis; ascis 2-3-sporis; sporidiis oblongis, utrinque late rotundatis, non vel vix constrictis, fuscis, $34-38 \mu$ longis, $14-17 \mu$ latis.

Hab. in foliis *Aglaiae* sp. (Meliaceae), Palawan, Taytay, Ins. Philipp. (MERRILL).

141. *Meliola Amoorae* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4453

13., 1918, p. 364. — Maculae epiphyllae, atrae subpelliculosae irregulares et magnam partem folii occupantes; mycelio abundante, ex hyphis laevibus brunneis radiantibus $7-8\ \mu$ cr. formato; ramis oppositis; hyphopodiis capitatis numerosissimis, oppositis, cellula superiore ovata, $9-10\ \mu$ longa, $6\ \mu$ lata, cellula inferiore $4-5\ \mu$ longa; hyphopodiis mucronatis ampulliformibus, irregularibus, usque ad $15\ \mu$ longis; setis paucis, rectis, erectis, opacis, acutis, $450-600\ \mu$ longis, ad basim $10\ \mu$ latis; peritheciis numerosis, globosis, atris, subopacis, $120-130\ \mu$ diam.; ascis ovatis 40×20 , 4-sporis; sporidiis subcylindræis, utrinque late rotundatis, 4-septatis, ad septa leviter constrictis, brunneis, $30 \times 12-15$.

Hab. ad folia *Amoora* (Meliaceae), Mount Binuang, Prov. Tayabas Luzon, Ins. Philipp. (RAMOS et EDAÑO).

142. *Meliola banahaensis* H. S. Yates, The Philipp. Journ. of Sc., Bôt., 4484

13., 1918, p. 364. — Hypophylla, plagulas orbiculares $3-8\ \text{mm.}$ diam. velutinas atrae formans; mycelio ex hyphis densissime intertextis ramosis castaneo-brunneis $7-8\ \mu$ crassis formato; hyphopodiis capitatis alternantibus, cellula superiore ovata $12-15\ \mu$ diam., cellula inferiore brevi, $6-8\ \mu$ longa; hyphopodiis mucronatis paucis, irregularibus, ampulliformibus, usque ad $20\ \mu$ longis; setis mycelicis numerosissimis, rectis, erectis, ad basim geniculatis, tota longitudine opacis, $300-350\ \mu$ longis, $8-10\ \mu$ latis; ad apicem acutis vel bi-trifurcatis, dentibus $5-8\ \mu$ longis; peritheciis numerosis, $200-250\ \mu$ diam., atris, opacis; ascis $65-75 \times 30$, bisporis; sporidiis cylindræis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, $50-55 \times 19-21$.

Hab. in foliis *Dysoxyl* (Meliaceae), Mount Banahao Prov. Laguna Luzon, Ins. Philipp. (OCAMPO).

143. *Meliola Guareae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 42 (1912). — 4485

Caespitulis epiphyllis, saepius confluenti-repandulis, $2-10\ \text{mm.}$ diam., sublatiuscule fibrillosis, parvissetulosis, siccando frustulatim deciduis, hyphis laxe intertextis, rectis; $10\ \mu$ cr., opposite ramosis, laxe patentimque hyphopodiatis; hyphopodiis 2-cellularibus, $20-25 \times 10$, cylindræis vel subclavulatis, alternis; rarissime ampulliformibus et oppositis, patentissimis vel leniter subretrorsis; setulis sparsis vel hinc inde paucigregariis, erectis, rigidulis, acutissimis, $250-1000 \times 10$, opace nigris; peritheciis e globoso depressis, $180-200\ \mu$ diam., coriacellis, astomis, vix papillatis; contextu opaco indistincto; ascis ellipsoideis, mox diffuentibus, bisporis; sporidiis cylindræis, quadrisep-

tatis, ad septa non vel vix constrictis, utrinque late rotundatis, 50×20 , loculis omnibus subaequalibus grosse 1-guttatis, e latere sat compressis 16 u tantum latis, obscure fulgineis.

Hab. in foliis vivis *Guareae Balansae* (Meliaceae), in silvis prope Puerto León, Misiones, Argentina.

144. *Meliola guareicola* Stev., Mel. Porto Rico, in III. Biol. Monogr. 4488 II, 1916, p. 521. — Coloniis epiphyllis, circularibus, punctiformibus, 1-4 mm. diam., atris; mycelio dense contexto, crustam facile separabilem efformante; hyphopodiis capitatis alternis vel irregularibus, crebris, cellula capitata globulosa, ovoidea vel piriformi, 14×10 , basilari 2-3 μ longa; hyphopodiis mucronatis alternis vel oppositis, ampulliformibus, collo tenui, 16-18 \times 7; setis perithecialibus nullis, mycelialibus copiosis, colonias dense tegentibus, 200-300 \times 7, fuscis, apice acuto pallidis, in parte superiore uncinatis vel contortis; peritheciis minutis, 100-500 μ , distincte ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 37 \times 10.

Hab. in foliis *Guareae trichilioidis* (Meliaceae), Porto Rico. — *M. Guareae* saepe consociata, a qua setis uncinatis facile dignoscitur.

145. *Meliola platysperma* Theiss., Broteria, Bot., v. XII, 1914, fasc. I, 4487 p. 23. — Plagulae piceo-atrae, 4 mm. diam., orbiculares. Hyphae mycelii rubro-brunneae, oppositae ramosae, 10 μ crassae, dense intertextae, cellulis ca. 25 μ longis. Hyphopodia capitata alterna, elongato-clavata, pedicellata, saepe unilateralia, 27 μ longa, supra 12-14 μ lata; hyphopodia mucronata typice opposita, ampulliformia, sinuose recurvata, continua. Setae myceliales atro-nitentes numerosae, basi geniculatae 10 μ crassae, rectae, apice obtusae, laetiores 5 μ crassae, integrae, 500-700 μ longae. Perithecia 250-280 μ diam., globulosa grosse verrucosa, atro-nitentia, aetate umbilicata, demum collapsa, cellulis polygoniis ca. 50 μ magnis, rubro-brunneis extus acute prominulis contexta. Asci 4-spори, maturitate ovato-piriformes, usque 90 \times 75. Sporae brunneae, 4-septatae, utrinque rotundatae, vix constrictae, 50-56 \times 24-28, cellulis aequalibus.

Hab. epiphylla in foliis *Guareae* (Meliaceae), S. Leopoldo, Brasiliae merid. (J. RICK).

146. *Meliola opposita* Syd. in Leaflets of Philipp. Bot. VI (1913) p. 4488 1924. — Hypophylla, maculas aterrimas, velutinas, primo rotundatas, 3-10 mm. latas, saepe confluyendo irregulares et multo majores efformans; mycelio ex hyphis ramosis, obscure fuscis, 7-10 μ

latis; septatis, composito; hyphopodiis capitatis numerosissimis et confertis, plerumque oppositis, rarius alternis, bicellularibus, rectis vel leniter curvatis, fuscis, 17-22 μ longis, cellula basali brevi, superiore subglobosa, 9-12 μ lata; hyphopodiis mucronatis oppositis, ampulliformibus, 18-24 μ longis; setis mycelicis numerosissimis, rectis, erectis, rigidis, usque ad apicem opacis, apice acutis, 300-4000 \times 8-9; peritheciis numerosissimis, globosis, atris, 150-185 μ diam.; in sicco profunde collapsis, rugulosis; ascis ovatis, 2-3-sporis, 40-50 \times 20-25; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, fusco-brunneis, 34-38 \times 12-16.

Hab. in foliis vetustis *Meliaceae* ejusdam, Cabadbaran, Mindanao, ins. Philipp. — Hyphopodiis capitatis typice oppositis, setis copiosis, acutis, obscuris et peritheciis collapsis dense gregariis praecipue distincta.

147. *Meliola parvula* Syd. in Leaflets of Philipp. Bot. VI (1913) p. 4489

1925. — Mycelio hypophyllo, non vel parum maculiformi, subeffuso, laxo, ex hyphis longiusculis, ramosis, septatis, 5-6 μ crassis composito; hyphopodiis capitatis numerosis, oppositis vel alternantibus, pro ratione parvulis et gracilibus, 11-17 \times 5-6, cylindraceis, rectis, apice semper rotundatis, cellula basali brevi; hyphopodiis mucronatis oppositis, usque ad 21 μ longis; setis mycelicis modice evolutis, rectis, erectis, rigidis, simplicibus, 300-700 \times 7-9, inferne opacis, superne dilutioribus, apice acutiusculis; peritheciis laxè dispositis, globosis, parum tuberculatis, atris, 150-180 μ diam., in sicco collapsis, contextu e cellulis 9-11 μ diam. composito; ascis ovatis, 2-3-sporis, 35-40 \times 22-30; sporidiis oblongis, utrinque obtusis, 4-septatis, ad septa constrictis, fuscis, 28-32 \times 11-14.

Hab. in foliis vetustis *Meliaceae* ejusdam, Cabadbaran, Mindanao, ins. Philipp. — Hyphopodiis pro ratione gracilibus et sporidiis parvulis praecipue distincta.

148. *Meliola Sandorici* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 4490

of Sci. VIII (1913) p. 391. — Mycelio plagulas epiphyllas, velutinas, orbiculares, nigritylas, dispersas, 2-4 mm. latas formante; hyphis centrifugis, ramosis, fuscis, ad 8 μ latis, hyphopodiis capitatis alternantibus, oblongo-clavatis, crebris, 2-cellularibus, 12 \times 6-8 et hyphopodiis mucronatis 15 \times 7-8 obsessis; setis nullis; peritheciis in centro mycelii sparsis, globulosis, astomis, usque ad 150 μ diam., atris; ascis 2-sporis, 30 \times 20; sporidiis oblongis, utrinque rotundatis, 4-septatis, flavo-fuscis, subconstrictis, 30 \times 10-12.

Hab. ad folia *Sandorici indicici* (Meliaceae), Luzon, Prov.

Laguna, Los Baños, ins. Philipp. (BAKER). — A *M. Usteriana* Rehm recedit hyphis elongatis sporidiisque constrictis.

149. *Meliola sinuosa* Doidge, Trans. R. Soc. South Afr. V, 1917, p. 735 4491 et 746, t. 64 fig. 33. — Amphigena, plerumque hypophylla, maculas, atras, velutinas, 1-5 mm. diam. efficiens; hyphis sinuosis, 5-11 μ crassis, interdum ad septa constrictis, cellulis 18-44 μ longis, ramis oppositis v. unilateralibus, saepe anastomosantibus; hyphopodiis capitatis alternis v. unilateralibus, 18-25 \times 12-15, stipitatis, cellula superiore 14-15 μ long., forma varia subcylindrica, curvata v. sublobata, apice truncata v. convexa; hyphopodiis mucronatis raris, 14-15 \times 10-16; setis mycelio numerosis, sparsis, erectis, simplicibus, 250-350 \times 8-10, opacis; peritheciis sparsis, atris, globulosis, 160-220 μ diam.; ascis elliptico-ovatis, breviter pedicellatis, bisporis, sporidiis 4-septatis, cellula media majore, cylindricis, utrinque rotundatis, ad septa leniter constrictis, 50-55 \times 15-18.

Hab. in foliis *Trichiliae emeticae* (Meliaceae), Lemana, Spelonken, Zoutpausberg Dist. Africa austr. (E. M. DOIDGE).

150. *Meliola Trichiliae* Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 4492 1920, p. 99. — Epiphylla, maculas irregulares parum conspicuas atro-griseas, 2-5 mm. diam., efformans; mycelio denso brunneo, hyphis rectis oppositis ramosis 24-30 \times 8; hyphopodiis capitatis numerosis, confertissimis oppositis raro alternis, cylindraceis, cellula superiori 20-25 \times 12, basali 6-8 \times 8; hyphopodiis mucronatis non visis; setis mycelicis numerosis, sparsis, opacis, rectis v. subrectis, septatis, simplicibus, apice pellucidis acutis, 300 \times 10-12; peritheciis verrucosulis, leniter depressis, atris, 200 \times 240 μ diam.; ascis evanidis; sporidiis 4-septatis, brunneis, cylindraceis, leniter constrictis, obtusis, 50-52 \times 16-18.

Hab. in foliis *Trichiliae retusae* (Meliaceae), ad ripas Aruwimi, Congo Africae (BEQUAERT). — Proxima *M. deciduae, parvulae, sinuosae*.

151. *Meliola leptochaeta* Syd., Ann. Mycol. 15., 1917, p. 187. — Hypo- 4493 phylla, plagulas irregulares primitus minutas dein plus minus effusas saepe confluentes praecipue nervos sequentes atro-griseas formans; mycelium densissimum, ex hyphis copiose ramosis anastomosantibusque 6-9 μ crassis fusciculis flexuosis vel torulosis formatum; hyphopodia modice copiosa, alternantia, oblonga, 12-19 μ longa, integra, cellula superiore 7-9 μ lata, inferiore brevi; hyphopodia mucronata rara, singularia vel opposita, 18-25 μ longa; setae mycelicae modice numerosae, graciles haud rigidae, 250-340 μ longae,

basi 7-9 μ latae, inferne atrae opacae, superne pellucidæ, obtuse attenuatae, apicem versus saepe leniter flexuosae; perithecia sparsa, globosa, astoma, glabra, 150-200 μ diam.; asci 2-4-spori; sporae cylindræae, 4-septatae, leniter constrictae, utrinque rotundatae, 35-42 \times 12-14, cellulis aequalibus; conidia 4-cellularia, 30-38 μ longa, cellulis duabus mediis multo majoribus 9-10 μ latis obscurioribus, cellulis extimis appendiculiformibus pallidioribus multo minoribus angustioribusque.

Hab. in foliis *Vavaea* spec. (Meliaceae), Rizal, Luzon Ins. Philipp. (H. S. YATES).

152. *Meliola banguiensis* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4494 13., 1918, p. 365. — Amphigena, plerumque epiphylla, plus minus effusa, plagulas subarachnoideas, orbiculares, 0,3-2,0 cm. diam., vel confluentes efformans; mycelio modice evoluto, ex hyphis ramosis brunneis 7-8 μ diam. composito; hyphopodiis capitatis alternantibus, numerosis, cellula superiore ovata, 10-18 μ longa, 10-12 μ lata, cellula inferiore 5 μ longa; hyphopodiis mucronatis plerumque oppositis, ampulliformibus, 18-22 μ longis, setis mycelicis numerosis, 350-650 μ longis, 10-12 μ crassis, circa perithecia oriundis, erectis, rectis, simplicibus, atris, opacis, apicibus acutis; peritheciis numerosis, globosis, in sicco collapsis, 124-175 μ diam., tuberculatis; ascis ovatis, 6-8 sporis, 40 \times 18, evanescentibus, sporidiis oblongis, 4-septatis, ad septa leviter constrictis, brunneis, 36-40 \times 11-14.

Hab. ad folia *Menispermaceae* cujusdam, Bangui, Llocos Norte, Prov. Luzon, Ins. Philipp. (RAMOS).

153. *Meliola Mollinediae* Theiss., Broteria, Bot., v. XII, 1914, fasc. I, 4495 p. 24, fig. 4. — Epiphylla. Hyphae mycelii oppositè ramosae rectilineae, cellulis elongatis, brunneolae, 6-8 μ crassae. Hyphopodia capitata distantia, alterna, 16-22 \times 10-12, pedicellata, capitulo plerumque recurvato et diverse lobato, rarius integro clavato; hyphopodia mucronata opposita, versiformia, lata basi sessilia, alia clavata integra vel subclavata, alia in collum brevissimum angustata vel demum longius producta, recta vel apice solum incurva vel sinuosa. Setae myceliales 300 μ longae, basi 8 μ crassae non geniculatae, apice longe attenuatae, acutatae. Perithecia ca. 200 μ diam., globulosa, plerumque sub basi setis mycelialibus circumdata, astoma, aetate collapsa parenchymatice contexta (cellulis polygoniis 10-15 μ cr., brunneis. in parte superiore, perithecii membrana exteriori obscuriore et crassiore, modice angulose prominulis). Asci

2-3-spori, elliptici, 48-56 \times 28-35; sporae rectae, cylindricae, brunneae, 4-septatae, 36-40 \times 13-16, ad septa leniter constrictae, cellulis fere aequalibus.

Hab. in foliis *Mollinediae* (Monimiaceae), S. Leopoldo, Brasiliae meridionalis (J. RICK).

154. *Meliola Artocarpi* H. S. Yates, Philipp. Journ. Sc. Manila XII 4496 (1917) p. 362 (*M. Artocarpiae*). — Mycelio epiphylllo, plagulas atras, orbicularis, 3-5 mm. diam., ex hyphis sparsis brunneis septatis 8-10 μ crassis composito, ramis irregularibus; hyphopodiis capitatis numerosis, alternantibus vel irregularibus, cellula superiore globosa, 15 μ lata v. 24 \times 18; hyphopodiis mucronatis, paucis, irregularibus, ampulliformibus, 15-17 μ longis; setis mycelicis numerosis, 350-500 μ longis, erectis, ad basim abrupte geniculatis et 10 μ crassis, inferne atris, superne obscure brunneis acutis vel obtusis; peritheciis numerosis, 100-200 μ diam., globosis opacis tuberculatis; ascis 2-4-sporis, 70-80 \times 20-35; sporidiis brunneis, 4-septatis, cylindraceis, ad septa constrictis, utrinque late rotundatis 50-55 μ longis, 20-25 μ latis.

Hab. in foliis *Artocarpi* sp. (Moraceae), Catubing River, Samar, Ins. Philipp. (RAMOS).

155. *Meliola microtricha* Sydow, Ann. Mycol. 18., 1920, p. 157. — Epiphylla, plagulas primitus orbiculares velutinas dein confluyendo irregulares 1-5 mm. diam. formans; mycelium densissime intertextum, ex hyphis suberectis vel undulatis dense breviterque ramosis septatis castaneo-brunneis 8-10 μ crassis compositum; hyphopodia capitata sat numerosa, alternantia, 20-25 μ longa, cellula apicali integra vel fere integra saepe irregulari 15-18 μ longa vel lata, cellula basali plus minus longiore et angusta; hyphopodia mucronata non visa; setae mycelicae copiosissimae, rectae vel subrectae, ad apicem attenuatae, tota longitudine opacae, simplices, 150-200 μ longae, basi 7-9 μ latae; setae peritheciales etiam numerosae, mycelicis similes, sed plerumque paullo breviores et saepe ad apicem obtusae et pellucide fuscae; perithecia numerosa, gregaria 140-180 μ diam.; asci bispori; sporae oblongae, utrinque obtusae, fuscae, 4-septatae, non vel vix constrictae, 40-43 \times 15-18.

Hab. in foliis *Fici albae* (Moraceae), in insula Singapore, Straits Settlements, Asia (C. F. BAKER).

156. *Meliola umirayensis* H. S. Yates, The Philipp. Journ. of Sc., Bot. 4498 13., 1918, p. 370. — Maculas plerumque epiphyllas, atras, suborbiculares et 4-10 mm. diam., vel confluentes et magnam partem fo-

lii occupantes efformans; mycelio abundante, ex hyphis brunneis 6-8 μ composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore subglobosa vel lobata, 14-18 μ diam., cellula inferiore 12-16 μ longa, 5-6 μ lata; hyphopodiis mucronatis non visis; setis nullis; peritheciis paucis, 100-150 μ diam. atris, opacis; ascis bisporis 50 \times 20; sporidiis 3-septatis, ad septa constrictis, elongatis, utrimque late rotundatis, laeviter brunneis, 40-45 \times 12-14.

Hab. in foliis *Fici* (Moraceae), Umiray Prov. Tayabas, Luzon, Ins. Philipp. (RAMOS et EDaña).

157. *Meliola Ficum* H. S. Yates, The Philipp. Journ. of Sc., Bot., 13., 4499

1918, p. 368. — Epiphylla, maculas atras, suborbiculares, 4-8 mm. diametro vel aggregatas subpelliculosas efformans; mycelio ex hyphis intertextis radiantibus ramosis castaneo-brunneis 6-7 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus, cylindraceis, cellula superiore ovata vel subglobosa, 10-12 μ diam.; cellula inferiore 4-5 μ longa; hyphopodiis mucronatis rarissimis, irregularibus, ampulliformibus, usque ad 20 μ longis; setis peritheci erectis, rectis vel leviter curvatis, atris, opacis, 500-600 μ longis, 15 μ latis, ad apicem acutis; peritheciis numerosis, globosis, tuberculatis, atris, opacis, 200-225 μ diam.; ascis bisporis, ellipsoideis, 45-50 \times 15-30; sporidiis oblongis, 4-septatis, ad septa constrictis, brunneis, utrinque rotundatis, 45-50 \times 15-18.

Hab. ad folia *Fici* sp. (Moraceae), Mount Bauahao Prov. Laguna, Luzon, Ins. Philipp. (OCAMPO).

158. *Meliola Soroceae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4500

Buenos Aires XXIII p. 44 (1912). — Caespitulis amphigenis, plerumque vero hypophyllis, suborbicularibus, 2-10 mm. diam., submembranaceis, setulosis, arcte adnatis, numquam sponte deciduis; hyphis saepius alterne ramosis, 7-9 μ cr., flexuosis; hyphopodiis alternis, antrorsis, cylindraceis vel subclavulatis, bicellularibus, 25-30 \times 9-12, fuliginis; setis erectis, leniter flexuosis, fuliginis, 200-350 \times 10, apice attenuatis ibique 2-3-lobulatis vel 2-3-fidis, denticulatis; peritheciis subglobosis, 150-250 μ diam., glabris, astomis, non collabentibus, fragillimis; ascis non visis; sporidiis cylindraceis, utrinque obtusissimis, e latere non compressis, 55 \times 20-22, quadri-septatis, vix constrictis, loculis omnibus aequalibus grosse 2-gut-tulatis.

Hab. in foliis vivis *Soroceae ilicifoliae* (Moraceae), in silvis prope Puerto León, Misiones, Argentina.

159. *Meliola Myrsinacearum* Stev., Mel. Porto Rico, in Ill. Biol. Mo. 4501

nogr. II, 1916, p. 508. — Coloniis amphigenis, in epiphyllis copiosioribus, irregulariter circularibus, 1-10 mm. diam., confluentibus; mycelio atro dense reticulato-contexto, hyphis 10 μ cr. plerumque oppositè ramosis; hyphopodiis capitatis alternis, unilateralibus vel irregulariter sparsis, non crebris, uno in quaque cellula, cellulis 34 μ circ. longis, cellula capitata subcylindrica vel anguste piri-formi, 20 \times 14, basilari 2-4 μ longa; hyphopodiis mucronatis paucis, sparsis, alternis seu oppositis, ampulliformibus, 24 \times 10; setis perithecialibus nullis, mycelialibus paucis vel nullis in coloniis juvenilibus, in vetustis copiosis, rectis vel leniter curvis, 625 et ultra μ longis, 10 μ cr., ubique fuscis, apice obtusis; peritheciis 200 μ diam., scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 51 \times 17-20.

Hab. in foliis *Ardisiae guadalupensis* (Myrsinaceae), et *Myrsinaceae* quaedam indeterminata, Porto Rico. — *M. amphitrichae* affinis; differt structura hyphopodiorum capitatorum.

160. *Meliola Groteana* Syd., Ann. Mycol. XI, 1913, p. 402. — Mycelio 4502 amphigeno, radiante, maculas orbiculares 2-4 mm. latas saepe confluentes et majores parum velutinas efficiente, ex hyphis fuscis septatis ramosis 7-9 μ latis composito; hyphopodiis capitatis oppositis vel alternantibus, breviter stipitatis, cellula superiore ovoidea vel truncata, 12-17 μ longis; hyphopodiis mucronatis parce evolutis; setis mycelicis numerosissimis, simplicibus, rectis, rarius leniter curvatis, 220-325 μ longis, 7-9 μ latis, tota longitudine pellucidis, superne obtusis, remote septatis; peritheciis sparsis, globosis, astomis, atris, 140-200 μ diam., leniter rugulosis; ascis ovatis, 2-3-sporis, 45-60 \times 23-28; sporidiis oblongo-cylindraceis, utrinque late rotundatis, 4-septatis, ad septa saepe valde constrictis, fuscis, 40-46 \times 14-17.

Hab. in foliis *Maesae lanceolatae* (Myrsinaceae), Amani, Africa or. trop. (GROTE). — *Meliolae strychnicolae* Gaill. affinis.

161. *Meliola Maesae* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 4503 of Sci. VIII (1913) p. 392. — Mycelio hypophyllo plagas velutinas, orbiculares, atras, 0,5-2 cm. latas late arachnoideo-marginatas formante; hyphis mycelialibus ramosis, subcurvatis, fuscis, 7-9 μ cr., hyphopodiis capitatis 2-cellularibus, ovoideo-elongatis, rectis vel subcurvatis, 15 \times 7-8, alternantibus vel oppositis, hyphopodiis mucronatis oppositis, raris, 15 \times 6 obsessis; setis mycelialibus ad basim curvatis, erectis, apice acutatis, obscure fuscis, circ. 250 \times 8-9; peritheciis globulosis, astomis, haud verrucosis, in centro mycelii

sparsis, 150 μ circ. diam.; ascis ovoideis, bisporis, 30 \times 20; sporidiis oblongis, utrinque obtusis, 5-cellularibus, haud constrictis, flavo-fuscis, 20 \times 9-10.

Hab. ad folia et ramos vivos *Maesae laxae* (Myrsinaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Affinis *M. Telosmae* Rehm, a qua differt hyphis undulatis et hyphopodiis omnino diversis.

162. *Meliola peregrina* Syd., Enum. Philipp. Fungi II, in Philipp. 4504

Journ. of Sci. VIII (1913) p. 479. — Amphigena, maculas atras minutissimas $\frac{1}{3}$ -1,5 mm. diam. discoideas formans; mycelio ex hyphis radiantibus, ramosis, longiusculis, castaneo-brunneis, septatis, 7-9 μ crassis formato; hyphopodiis capitatis innumeris, densissime stipatis, alternantibus, obscure brunneis, 12-17 \times 10-12, cellula superiore late rotundata, inferiore brevi; hyphopodiis mucronatis rarissimis; setis nullis; peritheciis plerumque solitariis in quaque macula, rotundatis, applanatis, atris, ostiolatis, 200-300 μ latis, contextu opaco indistincte hyphoideo; ascis ovatis, bisporis, 45-54 \times 25-35; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, obscure fuscis, 34-41 \times 12-16.

Hab. in foliis vivis *Maesae laxae* (Myrsinaceae), Luzon, Prov. Nueva Vizcaya, ins. Philipp. — *M. clavisporae* Pat. habitu subsimilis.

163. *Meliola furcillata* Doidge, Trans. R. Soc. South Afr. V, 1917, p. 738 4505

et 747, t. 65 f. 39. — Amphigena, maculas tenues atras, 2-3 mm. diam. efficiens; hyphis rectis v. sinuosis, fuscis, 6-8 μ crassis, cellulis 18-21 μ long. compositis, ramis oppositis v. alternis v. unilaterialibus, breviter stipitatis 18-21,5 μ long., cellula superiore ovata recta, incurvata v. recurvata 10,5-12,5 \times 7-9, hyphopodiis mucronatis inter hyphopodia capitata interspersis, 14-18 μ long., ampullaceis, collo longiore plerumque curvato; setis mycelicis prope perithecia congregatis, 330-400 \times 7, basi opacis semel v. bis abrupte geniculatis, superne rectis, rigidis, pellucidis, plus minusve torulosis, prope apicem leniter constrictis, apice mucronatis v. 2-3 dentatis; peritheciis sparsis v. subaggregatis, atris globosis, verrucosis, 160-180 μ diam.; ascis 2-sporis; sporidiis, 4-septatis, cylindricis, utrinque, rotundatis, ad septa constrictis, 43-45 \times 16-18.

Hab. in foliis *Maesae rufescentis* (Myrsinaceae), Amau-zimtoti, Natal, Africa austr. (E. M. DOIDGE).

164. *Meliola parathesicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4506

II, 1916, p. 492, fig. 20. — Coloniis hypophyllis, irregulariter cir-

cularibus, punctiformibus, 1-2 mm. diam., mycelio brunneo contextum compactum efformante, hyphis 8 μ diam. irregulariter ramosis, hyphopodiis capitatis alternis vel sparsis, creberrimis, inter se adjacentibus, cellula capitata ovoidea vel subglobulosa, interdum leniter angulosa, 20×14 , basilari 3-7 μ longa; hyphopodiis mucronatis paucis, sparsis, alternis seu oppositis, ampulliformibus, 20×7 ; setis mycelialibus nullis, perithecialibus paucis, 1-5, basilaribus, rectis, circ. 90×7 , apice obtusis, ubique fuscis; peritheciis 135-150 μ diam., papillis latiusculis conoideis asperatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, cylindraceo-ellipsoideis, leviter constrictis, obtusis, 48×20 .

Hab. in foliis *Parathesis serrulatae* (Myrsinaceæ), Porto Rico. — Affinis *M. mayapaecolae*; differt setis perith. et structura hyphop. capitatorum.

165. *Meliola Linocierae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 550. — 4507

Epiphylla, plagulas minutas primo orbiculares 2-5 mm. diam. dein irregulares confluentes leniter velutinas atras formans; mycelio ex hyphis densissime intertextis breviter ramosis copiose anastomosantibus castaneo-brunneis 6-8 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus v. saepe dense approximatis, crasse cylindraceis, integris, $16-22 \times 10$, cellula superiore ovata, basali brevi; hyphopodiis mucronatis oppositis, usque 26 μ long.; setis mycelicis numerosissimis, rectis, simplicibus, ad apicem acutis, atris tota longitudine opacis, $150-200 \times 5-8$; peritheciis sparsis, minutis, 70-100 μ diam., astomis; ascis 2-3 sporis; sporidiis ellipsoideo-oblongis v. oblongis, 4-septatis, constrictis, castaneo-brunneis, $32-38 \times 14-18$; hyphis conidiophoris simplicibus, dilute fuscis, copiose septatis (articulis 20-25 μ long.) toruloso-flexuosis, 4-6 μ crassis; conidiis fusiformibus, basi rotundatis, ad apicem flagellatis, 3-septatis, non constrictis, dilute fuscis, $24-38 \times 6-8$.

Hab. in foliis *Linocierae Cumingianae* (Oleaceæ), Antipolo prov. Rizal Ins. Philippin. (M. RAMOS).

166. *Meliola tayabensis* H. S. Yates, Philipp. Journ. Sc. Manila XII 4508

(1917) p. 369. — Hypophylla, maculas atras, orbiculares 1-2 cm. diam., saepe confluentes et irregulares, dein plus minusve totam superficiem folii obtegentes; mycelio ex hyphis obscure brunneis rectis septatis irregulariter ramosis 6 μ latis composito; hyphopodiis capitatis numerosis, alternantibus cellula superiore subglobosa circiter 10 μ lata, inferiore 6-7 μ longa; hyphopodiis mucronatis irregularibus, ampulliformibus, usque ad 17-20 μ longis, setis my-

celicis numerosis, 250-300 μ longis, 8-10 μ latis, erectis, rectis vel leviter curvatis, atris, opacis, apice simplicibus, acutis vel obtusis; peritheciis paucis globosis, glabris, atris, opacis, 150-200 μ diam., in sicco collapsis; ascis evanescentibus; sporidiis 4-septatis, fuscis, cylindraceis, utrinque late rotundatis, ad septa leviter constrictis, 40-50 \times 14-16.

Hab. in foliis *Linociera* sp. (Oleaceae), Basiad, Prov. Tayabas Luzon, Ins. Philipp.

167. *Meliola Mayepeae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4509 II, 1916, p. 596, fig. 46. — Coloniis amphigenis, plerumque vero epiphyllis, circularibus, 1-5 mm. diam.; mycelio atro densiuscule reticulato, hyphis 7 μ cr., ramis oppositis, saepius angulum acutum efformantibus; hyphopodiis capitatis minutis, alternis, non confertis, uno pro cellula, cellulis 35 μ c. longis, cellula capitata obovoidea 10 \times 7, basilari 3 μ longa; hyphopodiis mucronatis non visis; setis perithecialibus nullis, mycelialibus paucis vel copiosis, circa perithecia saepe abundantibus, leniter curvis, circ. 250 \times 6, ubique fuscis, apice simplici obtuso; peritheciis 170 μ diam., scabris; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 30-35 \times 17.

Hab. in foliis *Mayepeae domingensis* (Oleaceae), Mayaguez Mosa et El Alto de la Bandera, Porto Rico. — A *M. brasiliensi* distinguitur forma hyphopodiorum capitatis et basi setarum.

168. *Meliola mayepeicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4510 II, 1916, p. 519. — Coloniis epiphyllis, circularibus, punctiformibus, 1-2 mm. diam.; mycelio atro, hyphis 9 μ crassis, ramis plerumque oppositis, dense reticulato-contextis; hyphopodiis capitatis latis, alternis, crebris, uno pro cellula, cellulis 20 μ circ. longis, cellula capitata piriformi, 24 \times 17, basilari 7 μ longa; hyphopodiis mucronatis paucis, alternis vel oppositis, phialiformibus, curvulis, angustis, 16-18 \times 6; setis perithecialibus nullis, mycelialibus paucis, rectis vel leniter curvatis, 150 \times 7, ubique fuscis, apice obtusis; peritheciis 100-119 μ diam., ob papillulas conoideas scabris; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 34 \times 14.

Hab. in foliis *Mayepeae domingensis* (Oleaceae), Mayaguez Mesa et Maricao, Porto Rico. — A *M. Mayepeae*, cui saepe socia, etiam nudo oculo dignoscitur.

169. *Meliola Opilliae* H. et P. Sydow, Ann. Mycol. XI, 1913, p. 327. — 4511 Maculas amphigenas velutinas orbiculares minutas 2-3 mm. latas

dein plus minus confluentes atras efformans; hyphis ramosis, obscure brunneis, septatis, 7-9 μ crassis; hyphopodiis capitatis numerosissimis, semper exacte oppositis v. suboppositis, clavatis, regularibus, 16-18 μ long., cellula superiore late rotundata, inferiore multo brevior; hyphopodiis mucronatis rarioribus, oppositis, ampulliformibus, 17-20 μ long.; setis mycelicis numerosis, rigidis, erectis simplicibus, apice obtusis v. dentatis aut 2-3-furcatis (dentibus usque 10 μ long.), obscure brunneis, 200-280 μ long., 10-11 μ cr.; peritheciis numerosis, aggregatis, globosis, 175-210 μ diam., vix tuberculatis; ascis ellipticis v. ovatis, 3-4 sporis, 40-48 \times 19-24; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, 36-42 \times 10-16.

Hab. in foliis *Opiliae amentaceae* Roxb. (Opiliaceae), Bolampatty valley Coimbatore Madras Pres., Indiae or. (C. E. C. FISCHER). — *Socia Asterina crebra* H. Syd.

170. *Meliola Livistonae* H. S. Yates, Philipp. Journ. Sc. XII (1917) 4512 p. 366. — Hypophylla, plagulas aterrimas, velutinas, orbiculares, 3-5 cm. diam.; mycelio laxo, ex hyphis irregulariter ramosis obscure brunneis septatis 6-7 μ crassis ex peritheciis radiantibus composito; hyphopodiis capitatis paucis, alternantibus vel irregularibus, numquam oppositis, cellula superiore irregulariter lobata, circiter 15-25 μ diam., cellula inferiore saepe curvata 20-25 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis, setis mycelicis numerosissimis, 300-350 μ longis, 8-9 μ latis, erectis, rectis vel leviter curvatis, opacis, acutis vel 2-3 denticulatis, dentibus 5-6 μ longis; peritheciis globosis, opacis, atris, tuberculatis, 175-250 μ diam.; ascis evanescentibus; sporidiis oblongis, 4-septatis, ad septa leviter constrictis, brunneis, utrinque late rotundatis, 50-55 \times 12-22.

Hab. in foliis *Livistonae* sp. (Palmae), Basiad, Tayabas, Luzon, Ins. Philipp.

171. *Meliola incompta* Sydow, Ann. Mycol. 18., 1920, p. 98. — Epi- 4513 phylla, plagulas primitus orbiculares dein confluyendo irregulares tenues variae magnitudinis formans; mycelium densissime reticulatum, ex hyphis brevibus copiosissime ramosis anastomosantibusque septatis castaneo-brunneis 6-8 μ crassis compositum; hyphopodia capitata numerosissima, opposita vel unilateralia, cellula superiore globosa vel subglobosa integra ca. 12 μ alta 10 μ lata, cellula inferiore brevissima saepe vix conspicua; hyphopodia mucronata multo rariora usque 24 μ longa; setae myceliales copiosae,

rectae, ad apicem acutae, tota longitudine opacae vel superne pelliculae, simplices, 350-600 μ longae, inferne 10-12 μ crassae; perithecia laxe gregaria, 80-110 μ diam.; asci 2-3-spori, fugaces; sporae cylindratae, 4-septatae, leniter constrictae, utrinque rotundatae, 38-42 \times 12.

Hab. in foliis *Phytolaccae dininae* (Phytolaccaceae), Los Baños, Ins. Philippin. (F. CLARA).

172. *Meliola Gaillardiana* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4514

II, 1916, p. 529, fig. 55. — Coloniis epiphyllis, minutis, circularibus, 1-2 mm. latis, atris; mycelio irregulari, undulato, densissime reticulato contexto, ramis 9 μ cr., cellulis 14 μ circ. longis; hyphopodiis capitatis parvis, alternis vel sparsis, crebris, 7-17 μ inter se distantibus, ovoideis, piriformibus vel curvatis, 10 μ diam., cellula basilari 5-6 μ longa; hyphopodiis mucronatis paucis, sparsis, alternis vel oppositis, phialiformibus, rostro tenuiusculo; setis mycelialibus copiosis, rectis, rigidis, 220 \times 10, opacis, apice cristam minute spinulosam 17-34 μ latam, interdum furcatam gerentibus; peritheciis 170 μ diam., leniter scabris, papillis vix 6 μ altis, ostiolo nullo; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, loculis terminalibus longioribus, 14 \times 3.

Hab. in foliis *Piperis aduncti* (Piperaceae), Porto Rico. — Ob setas apice cristatas perdistincta species.

173. *Meliola paucipes* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4515

1916, p. 510, fig. 40. — Coloniis amphigenis, plerumque hypophyllis, irregularibus, sparsis, diffusis, 5-10 mm. diam., mycelio ex hyphis 7 μ cr., irregulariter ramosis laxo contextis composito; hyphopodiis capitatis alternis vel irregularibus, inter se distantibus, 70-100 μ , ovoideis vel piriformibus, saepe angularibus, cellula capitata 17 \times 14, basilari 4 μ circ. longa; hyphopodiis mucronatis plerumque alternis, ampulliformibus; setis mycelialibus nullis, perithecialibus sparsis, longissimis, 700 \times 10, rectis, simplicibus, apice obtusis; peritheciis 160 μ diam., leniter scabris, non ostiolatis; ascis evanescentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37 \times 14.

Hab. in foliis *Piperis blattarum* (Piperaceae), Mayaguez Mesa, Porto Rico. — Setis mycelialibus elongatis et hyphopodiis remotis praecipue dignoscenda.

174. *Meliola contorta* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4516

1916, p. 500 fig. 30. — Coloniis amphigenis, plerumque hypophyllis, irregulariter circularibus, 1.6 mm. diam., atris; mycelio laxiuscule

reticulato-textecto, hyphis 7 μ diam., plerumque oppositè ramosis; hyphopodiis capitatis latis, alternis copiosis sed non confertis, ovoides v. ellipsoideis uno pro cellula, cellulis 35 μ circ. longis, cellula capitata 17 \times 10, apice obtusa, basilari 7 μ circ. longa; hyphopodiis mucronatis oppositis, alternis vel sparsis, phialiformibus, collo tenui; setis mycelialibus paucis, sparsis, perithecialibus similibus; setis perithecialibus apice varie incurvis vel uncinatis, sat copiosis ad basim peritheciorum, 150 \times 10 circ., apice varie configuratis, nunc leniter attenuatis et papillis lateralibus copiosis acutiusculis praeditis, nunc uncinatis asperulis, nunc breviter dichotomis, ramis apice breviter dentatis; peritheciis 140 μ diam., leniter scabris, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 34-37 \times 10.

Hab. in foliis *Piperis hispidi* (Piperaceae), Las Marias, Porto Rico.

175. *Meliola piperina* Syd., Ann. Mycol., 14., 1916, p. 358. — Amphigena, 4517
 plerumque hypophylla, maculas minutas 1-3 mm. atras formans; mycelio repente, ex hyphis longis rectangulariter ramosis fuscis remote septatis, articulis 20-35 μ longis 18-10 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus vel unilateralibus, plus minus longe stipitatis, cellula apicali valde lobata, fere nunquam integra, saepe depressa, hinc latiore quam altiore, 20 μ lata et 18 μ alta, cellula basali (stipite) mox brevi, mox usque 10 μ longa; hyphopodiis mucronatis plerumque oppositis, in collum longum abeuntibus, usque 24 μ longis; setis mycelicis numerosis, atherimis, tota longitudine opacis, apice acutis, 300-500 μ longis, basi 10-12 μ latis, rectis vel rectiusculis; peritheciis paucis aggregatis, 120-170 μ diam., parum tuberculatis; ascis 2-3 sporis; sporidiis cylindraceis, utrinque rotundatis, 4-septatis, parum constrictis, brunneis, 32-36 \times 10-11.

Hab. in foliis *Piperis* sp. (Piperaceae), Los Baños, ins. Philipp. (C. F. BAKER). — *Mel. stenosporae* affinis.

176. *Meliola Osmanthi* Sydow, Ann. Mycol. 18., 1920, p. 157. — Epi- 4518
 phylla, plagulas primitus orbiculares 3-5 mm. diam. dein irregulares plus minus confluentes aterrimas formans; mycelium ex hyphis densissime intertextis valde breviterque ramosis septatis castaneis 6-8 μ crassis compositum; hyphopodia capitata copiosissima, densissime gregaria, alternantia vel opposita, semper integra, plerumque ovata, 18-20 μ longa, cellula superiore 9-11 μ lata; setae myceliales copiosae, rectae, simplices, tota superficie opacae, 250-

300 μ longae, basi 8-10 μ crassae, ad apicem acutae; perithecia gregaria, 170-250 μ diam., ob cellulas protuberantes verrucosa; asci nondum maturi.

Hab. in foliis *Osmanthi aquifolii* (Pirolaceae), Bando, Tokushima, ins. Shikoko, Japoniae (B. KRUG).

177. *Meliola Elmeri* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1537. — 4519

Amphigena, mycelio plagulas circulares 1-3 mm. latas, atras, velutinas efformante, ex hyphis densissime intertextis et valde ramosis, anastomosantibus, 8-10 μ cr., obscure fuscis composito; hyphopodiis alternis, capitato-clavatis, 12-18 \times 8-11; setis myceliis numerosis, rigidis, rectis vel subrectis, simplicibus, opacis, 200-250 μ longis, 6-9 μ cr.; peritheciis laxè aggregatis, atris, globosis, in sicco collapsis, non vel vix rugosis, 130-160 μ diam.; ascis 2-sporis, ovatis, 50 \times 35; sporidiis oblongis, 4-septatis, leniter constrictis, utrinque rotundatis, fuscis, 42-50 \times 14-17.

Hab. in foliis *Pittospori pentandri* (Pittosporaceae), Brooks Point, Palawan, ins. Philipp.

178. *Meliola tenuissima* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4520

II, 1916, p. 492. — *Amphigena* sed in hypophyllo magis copiosa; coloniis tenuissimis, nudo oculo inconspicuis ex hyphis undulatis, 7 μ diam., laxè reticulatis efformatis; hyphopodiis capitatis tenuibus, alternis, distantibus, cellula capitata globosa, ovoidali vel piriformi, non angulosa, 10 μ diam., basilari 3 μ circ. longa; hyphopodiis mucronatis paucis, alternis vel oppositis, ampulliformibus, 20 μ longis; setis mycelialibus nullis, perithecialibus paucis, 3-4, rectis, curvatis, vel etiam uncinatis, 100 \times 6, apice obtusis ibique interdum inflatis; peritheciis 170 μ diam., leviter scabris; ascis mox evanidis; sporidiis 4-septatis, brunneis, obtusis, ad septa haud constrictis, 34-37 \times 14-15.

Hab. in foliis *Gouaniae lupuloidis* (Rhamnaceae), Yauco et Villa Alba, Porto Rico. — Species exiguitate mycelii fere unica.

179. *Meliola Scutiae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 43 (1912). — 4521

Caespitulis saepius epiphyllis, parvis, orbicularibus, 1-3 mm. diam., obsolete concentricè zonatis, e membranaceo subcrustaceis, subvelutinis, aterrimis; hyphis ramosis, rectis, 6-9 μ cr., oppositè ramosis, fuliginèis; hyphopodiis patentissimis, oppositis, 2-cellularibus, 14-30 \times 8-9, e cylindraceo subclavulatis, saepe leniter retrorsum arcuatis; setulis praecipue circa perithecia evolutis, rectis, obtusiuscule acutatis, integerrimis, 200-300 \times 7-10, apice pellucidis, ceterum opacis; peritheciis subglobosis

200-400 μ diam., centro caespitulorum insidentibus, glabris, astomis, collabescentibus, nigris; ascis non visis; sporidiis subcylindraceis, utrinque obtuse rotundatis, fuligineis, 36-38 \times 16, e latere altero convexulis quadrisepatis, loculis omnibus grossè 1-guttatis.

Hab. in foliis vivis *Scutiae buxifoliae* (Rhamnaceae), in nemoribus prope Santa Cornelia, Jujuy: Argentina.

180. *Meliola Chiococcae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4522

II, 1916, p. 495, fig. 26. — Coloniis epiphyllis, irregularibus, circularibus, 1-5 mm. diam., mycelio atro, laxè reticulato, 7 μ diam., ramis plerumque oppositis et rectangularibus; hyphopodiis capitatis alternis, non crebris, 1 pro cellula, cellulis 20 μ circ. longis, cellula capitata irregulariter globulosa, angulosa, 17 μ diam., basilari 2-6 μ longa; hyphopodiis mucronatis non visis; setis mycelialibus nullis, perithecialibus paucis, rectis vel leniter curvis, 120 \times 7, apice obtusis, fuscis; peritheciis 170 μ diam., scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 37-41 \times 14.

Hab. in foliis *Chiococcae albae* (Rubiaceae), Vega Baja et Hornigueros, Porto Rico.

181. *Meliola microspora* Pat. et Gaill. — Syll. IX p. 426 — var. *afri-* 4523
cana Doidge, Trans. R. Soc. South Afr. V, 1917, p. 746, t. 63 fig. 29. — Hyphopodiis capitatis, 20-21 \times 7.8, cellula sup. ovata 14-16 μ longa; sporidiis 26-32 \times 10.5-14.

Hab. in foliis *Galopinae circaeoidis* (Rubiaceae), Woodbush, Afric. merid.

182. *Meliola Ixorae* H. S. Yates, Philipp. Journ. Sc. Manila XII (1917) 4524
p. 365 (*M. Ixoriae*). — Amphigena, maculas atro-griseas, orbiculares vel irregulares, 5-15 mm. diam., saepe confluentes formans; mycelio abundante, ex hyphis septatis flexuosis brunneis 5-8 μ cr. composito; ramis oppositis vel irregularibus; hyphopodiis capitatis numerosis, alternantibus vel unilateralibus, cellula superiore lobata vel rotundata 12-16 μ longa 10-15 μ lata; inferiore 5-12 μ longa, 6 μ lata; hyphopodiis mucronatis paucis, oppositis vel irregularibus, ampulliformibus, 12-14 μ longis; setis myceliis 600-750 μ longis, 8-10 μ latis, erectis, rectis vel leviter curvatis, saepe ad basim geniculatis, inferne opacis, atris, simplicibus, acutis; setis perithecialibus circ. 8 ad basim quoque perithecii; peritheciis globosis, atris, opacis, tuberculatis, 100-125 μ diam.; ascis, 2-4-sporis 55-65 μ longis, 20-26 μ latis; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa non constrictis, saepe leviter curvatis,

40 μ longis, 14 μ latis.

Hab. in foliis *Ixoræ philippinensis* (Rubiaceae), Manila, Ins. Philipp.

183. *Meliola Mitragynes* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 478. — Mycelio amphigeno, plerumque vero epiphylllo, tenuiter effuso, laxo, ex hyphis longiusculis; parce ramosis, fusco-brunneis, 7-9 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, ovatis vel oblongis, rectis vel leniter curvatis, 12-17 \times 9-13, cellula basali minuta, superiore globosa; hyphopodiis mucronatis, plerumque oppositis, ampulliformibus, usque ad 26 μ longis; setis mycelicis numerosis, simplicibus, rectis vel leniter curvatis, apice acutis, inferne opacis, apicem versus plus minusve dilutioribus, 300-425 \times 7-9; peritheciis sparsis, globosis, atris, glabris, 150-180 μ diam., in sicco collapsis; ascis ovatis, bisporis, 44-50 \times 25-30; sporidiis cylindræis, 4-septatis, ad septa leniter constrictis, utrinque late rotundatis, obscure brunneis, 35-42 \times 14-16.

Hab. in foliis vivis *Mitragynes diversifoliae* (Rubiaceae), Luzon, Prov. Nueva Vizcaya, ins. Philipp.

184. *Meliola palawanensis* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1539. — Mycelio amphigeno, plagulas discoidales vel irregulares, minutas, 2-4 mm. diam., saepius confluentes efformante, ex hyphis fuscis, densiuscule ramosis, 6-9 μ crassis composito; hyphopodiis capitatis numerosis, bicellularibus, 16-20 \times 10-12, clavatis vel irregularibus; hyphopodiis mucronatis alternantibus vel oppositis, usque ad 16 μ longis; setis mycelicis rectis, erectis, rigidis, simplicibus, 175-250 \times 7-9, opacis, apice acutis; peritheciis in mycelio sparsis, globosis, vix rugulosis, atris, 160-180 μ diam.; ascis ovatis, 2-3-sporis, fugacibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, vix vel leniter constrictis, fuscis, 32-36 \times 10-12.

Hab. in foliis vetustis *Morindæ Bartlingii* (Rubiaceae), Puerto Princesa, Palawan, ins. Philipp.

185. *Meliola Mussaendae* Syd., Ann. Mycol. 15., 1917, p. 190. — Amphigena, praecipue epiphylla, plagulas arachnoideas tenues irregulares primo minutas 1-2 mm. diam. dein confluentes effusas plus minus confluentes et saepe totam folii superficiem occupantes formans; mycelium ex hyphis brunneis 7-9 μ crassis septatis ramosis compositum; hyphopodia capitata sat numerosa, piriformia, alternantia, 15-22 μ longa, cellula superiore globulosa vel ovata 10-12 μ lata semper integra, inferiore brevi stipitiformi; hyphopodia mucronata

copiosa, alternantia vel opposita, lageniformia, usque $22\ \mu$ longa, basi $7-9\ \mu$ lata; setae tantum ad basim peritheciolorum evolutae, rectae vel subrectae, $170-250\ \mu$ longae, ad basim $7-9\ \mu$ crassae, sursum $6-7\ \mu$ crassae, summo apice late rotundatae et plerumque etiam leniter dilatatae, simplices vel etiam superne semel furcato-divisae (ramis erectis brevibus vel usque $25\ \mu$ longis obtusis); perithecia sparsa vel laxe gregaria, globosa astoma, in sicco collapsa, $120-160\ \mu$ diam., asci 2-3-spori; sporae oblongae, 4-septatae, leniter constrictae, fuscae, utrinque rotundatae, $26-35 \times 11-13$.

Hab. in foliis *Mussaendae philippicae* (Rubiaceae), Laguna et Los Baños, Luzon, Ins. Philipp. (M. RAMOS).

186. *Meliola mayaguesiana* Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4528

nogr. II, 1916, p. 500, fig. 31. — Coloniae amphigenis, plerumque hypophyllis, circularibus, 2-8 mm. diam.; mycelio atro densiuscule reticulato-contexto, hyphis $7\ \mu$ cr., irregulariter ramosis, contortis, intricatis; hyphopodiis capitatis minutis, alternis, non crebris, 1 pro cellula, cellulis $40\ \mu$ circ. longis, cellula capitata ovoidea vel truncata, apice saepe incrassata, 17×10 , basilari e brevissima $7\ \mu$ usque longa; hyphopodiis mucronatis paucis et sparsis, angustis, alternis, ampulliformibus, 27×7 ; setis perithecialibus paucis, 3-10, circ. 100×7 , ubique atris, contortis, plerumque spiraliter convolutis, interdum glomerulatis, apice obtusis; setis mycelialibus copiosis, rectis vel leniter curvis, longissimis, circ. 800×9 , fuscis, simplicibus; peritheciis $150\ \mu$ diam., ob papillas conoideas scabris; ascis 2-4-sporis; sporidiis 4-septatis, pallide brunneis, angustis, leniter constrictis, obtusis, $48-51 \times 7-9$.

Hab. in foliis *Policonureae* sp. plur. (Rubiaceae), Mayaguez, Piedras, alibique in Porto Rico. — Species notis variis facile dignoscenda.

187. *Meliola falcata* P et H. Syd., Ann. Mycol. X, 1912, p. 37. — Am- 4529

phigena, plerumque epiphylla, velutina, atra, plagulas orbiculares 2-4 mm. latas saepe confluentes et tunc irregulares efformans; peritheciis intra setas myceliales numerosissimas absconditis, globosis, verrucosis, atris, $200-230\ \mu$ diam.; mycelio ex hyphis fuscis anastomosantibus, $6-7\ \mu$ cr., composito; hyphopodiis mucronatis oppositis $15-18\ \mu$ long., capitatis alternantibus $22-25\ \mu$ long. cellula apicali usque $10\ \mu$ lata; setis mycelicis simplicibus, curvatis, saepe falcatis, opacis $175-250 \times 6-9$; ascis 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, fuscis, $38-48 \times 16-20$.

Hab. in foliis *Plectroniae ventosae* (Rubiaceae), Ama-

nyimtotè, Natal (E. M. DOIDGE).

188. *Meliola glabra* Berk. et Curt. — Syll. I p. 63. — var. *Psychotriæ* 4530
Stevens, *Meliola* Porto Rico in Illin. biol. Monogr. II, 1916, p. 482. —
Coloniis nunc minutis, mycelio mox ramoso et dense reticulato fere
ut in typo, nunc magis extensis et laxis, a typo valde receden-
tibus.

Hab. in foliis *Psychotriæ*, *Palicoureae*, *Coccocypseli* (Rubiaceae), Porto Rico.

189. *Meliola bayamonensis* L. R. Tehon, Bot. Gazette, 67., 1919, p. 506. — 4531
Coloniis hyphophyllis 2-5 mm. diam., mycelio laxè reticulato, ramu-
lis alternis; hyphis obscuris 4 μ cr. undulatis; hyphopodiis capi-
tatis alternis 30-60 μ inter se remotis, cellula apicali e globosa ovoi-
dea 8-10 μ diam., basali variabili 6-16 μ longa; hyphopodiis mucro-
natis paucis, alternis, 14 μ long.; setis mycelicis nullis, perithecia-
libus 5-7, decumbentibus e obscure brunneis opacis, 225 \approx 4-5, apice
acutis; peritheciis sparsis rugosis 100-135 μ ; ascis mox evanidis
sporidiis 4-septatis, 27-30 \approx 7, ad septa constrictulis.

Hab. in *Psychotria pubescenti* (Rubiaceae), prope
Bayamon, Porto Rico. — A *M. glabra* var. *Psychotriæ* setis peri-
thecialibus praesentibus, a *M. Psychotriæ* Earle habitu et confor-
matione hyphopodiorum praecipue diversa.

190. *Meliola maquilingiana* Syd., Ann. Mycol. 15., 1917, p. 188. — Amphi- 4532
gena, saepius epiphylla plagulas tenues primitus minutas 2-3 mm.
diam. dein plus minus effusas arachnoideas formans; mycelium
rectangulariter ramosum, ex hyphis castaneo-brunneis 7-8 μ crassis
rectis compositum; hyphopodia capitata modice copiosa, alternantia
15-18 μ longa, semper integra, cellula superiore globulosa vel ovata
10-12 μ lata, basali minuta, setae micelii modice copiosae, rectae,
simplices, apice late rotundatae, 140-250 μ longae, 6-8 μ crassae,
tota longitudine opacae vel rarius superne pellucidae; perithecia
laxe aggregata, globosa, 140-170 μ diam. in sicco collapsa; asci
2-3 spori; sporae oblongo-cylindratae, 4-septatae, vix vel leniter
constrictae, utrinque rotundatae, 27-32 \approx 11-13, brunneae.

Hab. in foliis *Psychotriæ* spec. (Rubiaceae), Mt. Maqui-
ling, Laguna, Ins. Philipp. (O. F. BAKER).

191. *Meliola Bakeri* Syd., Ann. Mycol. 14., 1916 p. 355. — Amphigena 4533
vel ramulicola, plagulas minutas 1-3 mm. longas subvelutinas atras
formans; mycelio denso, ex hyphis ramosis fuscis 7-10 μ crassis
anastomosantibus composito; hyphopodiis capitatis copiosis, alter-
nantibus vel oppositis, 16-22 μ longis, cellula superiore plerumque

ovata vel ovato-globosa semper integra 8-11 μ lata, inferiore semper brevior; setis mycelicis copiosissimis, rectis vel subrectis apice lanceolato-acutis; athermis, tota longitudine opacis, 250-400 μ longis, basi 9-12 μ latis; peritheciis gregariis globosis, in siccis collapsis, parum tuberculatis, 160-200 μ diam.; ascis 2-3-sporis, fugacibus; sporidiis cylindraceis, 4-septatis, non vel parum constrictis, brunneis, utrinque rotundatis, 38-42 \times 10-15.

Hab. in foliis *Tetrastigmatis* sp. (? Rubiaceae, an Vitaceae?), M. Maquilang ins. Philipp. (C. F. BAKER).

192. *Meliola anceps* Syd., Ann. Mycol. 14., 1916, p. 76. — Hypophylla, 4534
 plagulas irregulares usque 1 cm. longas subinde confluentes atras formans; mycelio ex hyphis longis rectis vel rectiusculis fuscis 7-8 μ crassis composito; hyphopodiis capitatis alternantibus, 15-20 \times 10-12, integris, late rotundatis, cellula basali brevi; hyphopodiis mucro atis non visis, setis mycelicis numerosis, praesertim perithecia circumdantibus, rectis vel leniter curvatis, 170-250 μ longis, 7-9 μ latis, atris, opacis, apicem versus dilutioribus et pelucidis, septatis, ad apicem plerumque late rotundatis vel lenissime etiam dilatatis, saepe etiam ad apicem lenissime denticulatis vel potius verrucosis raro bifidis (dentibus brevibus usque 5 μ , rarissime longioribus); peritheciis sparsis, globosis, astomis, haud tuberculatis, 140-160 μ diam., ascis 2-3-sporis; sporidiis cylindraceis, late rotundatis, fuscis, 4-septatis, parum constrictis, 24-27 \times 10-14.

Hab. in foliis *Uncariae guyanensis* (Rubiaceae), Seringal S. Francisco, Rio Acre, Brasiliae (E. ULE).

193. *Meliola Uncariae* Rehm, Ascomyc. Philipp. V, Leaflets of Phil. 4535
 lipp. Botany VI (1914) p. 2192. — Maculis epiphyllis, sparsis, discoideis, distincte marginatis, tenuibus, nigris, 2-3 mm. latis, ex hyphis centrifugis, rectis, parce ramosis, brevicellularibus, fuscis, 6 μ latis contextis; hyphopodiis capitatis 2-cellularibus, brevissime stipitatis, 15-20 μ altis, cellula superiore ovoideo-globosa 12 μ lata, plerumque oppositis raro solitariis, itemque hyphopodiis uncinatis, 12 \times 6-7, fuscis; setis nullis; peritheciis 2-5 in media parte macularum, atris, vix verrucosis, demum umbilicatis, glabris, 150 μ diam.; ascis ellipsoideis, bisporis; sporidiis oblongis, rectis, 4-septatis, utrinque rotundatis, non constrictis fuscis, 30 \times 10-12.

Hab. ad folia *Uncariae Perrottettii* (Rubiaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

194. *Meliola monensis* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4536
 1916, p. 506, fig. 35. — Coloniis plerumque epiphyllis atris, minu-

tis, 1-2 mm. latis, punctiformibus, mycelio densissime reticulato-texto, hyphis ramosis, undulatis, $7\ \mu$ cr.; hyphopodiis capitatis alternis vel oppositis, crebris; cellulis mycelialibus $20\ \mu$ circ. longis; cellula capitata irregulariter lobata, $17\ \mu$ circ. diam., basilari $7\ \mu$ circ. longa; hyphopodiis mucronatis paucis, sparsis, alternis vel oppositis, phialiformibus, collo tenui, saepe curvulo, $20\ \mu$ longis; setis perithecialibus nullis, mycelialibus copiosis, rectis, rigidis, atris, simplicibus, $400 \times 10-14$, apice obtusis; peritheciis $250\ \mu$ diam., leniter scabris; ascis 78×38 , mox diffluentibus; sporidiis 4-septatis, pallide brunneis, leniter constrictis, obtusis, $45-55 \times 20-22$.

Hab. in foliis *Amyridis elemiferae* (Rutaceae), Mona Island et Guayanilla, Porto Rico. — Species structura coloniarum et hyphopodiorum capit. perdistincta.

195. *Meliola citricola* Syd., Ann. Mycol. 15., 1917, p. 183. — Amphigena, 4537
 plagulas primitus plus minus orbiculares 2-5 mm. diam. tandem saepe effusas et subinde totam folii superficiem obtegentes formans; mycelium ex hyphis valde ramosis opace brunneis $7-9\ \mu$ crassis septatis irregularibus subinde torulosis compositum; hyphopodia capitata numerosa, alternantia vel subinde opposita, plerumque oblonga, ovata vel piriformia $18-22\ \mu$ longa, cellula superiore $8-11\ \mu$ lata, semper integra, cellula basali minuta; hyphopodia mucronata etiam numerosa, opposita, $20-25\ \mu$ longa, acutata, basi $8-10\ \mu$ lata; setae myceliales numerosae, tota longitudine opacae, atrae, $500-700\ \mu$ longae, basi geniculatae et $10-12\ \mu$ crassae, rectae vel subrectae, ad apicem 2-4-denticulatae vel breviter furcatae, dentibus mox minutissimis, mox longioribus (usque $15\ \mu$); perithecia sparsa, globosa, $130-160\ \mu$ diam., astoma; asci evanidi; sporae cylindraceae vel oblongae, utrinque rotundatae, 4-septatae, leniter constrictae, fuscae, $35-42 \times 14-18$, loculis fere aequalibus.

Hab. in foliis *Citri* prob. *C. nobilis* et *Citri* sp. (Rutaceae), San Antonio, Laguna et Rizal Luzon, Ins. Philipp. (RAMOS et H. S. YATES).

196. *Meliola Harana* Trotter. — *Meliola citricola* K. Hara, Journ. A- 4538
 gric. Soc. Shidzuoka Prefect. (« Shidzuokaken Nôkwaishô »), n. 263, 1919, p. 8, cum tab., nec Sydow — Tanaka, Mycologia, 12., 1920, p. 332. — Hyphis juvenilibus filiformibus tenuibus, ramosis, septatis hyalinis v. pallide coloratis, $2,5-3\ \mu$ cr., maturis crassioribus torulosis obscure brunneis, quandoque nucleatis $4-7\ \mu$ cr.; articulis seu chlamydosporis ellipsoideis v. subglobosis $8-15 \times 4-7$; conidiis Triposporioides stellatis $6-4$ brachyatis $2-4$ septatis, $40-60\ \mu$ cr.;

peritheciis globosis v. globoso-depressis, 200-230 μ cr., membrana nudâ, subparenchymatica carbonacea fragili, obscure brunnea, cellulis 6-12 μ cr.; ostiolo apicali non prominente, orbiculari, 15-20 μ lato; ascis obovatis, globosis v. ellipsoideis, apice rotundatis, basi pedicellatis crasse tunicatis, octosporis aparaphysatis, 40-70 \times 30-40; sporidiis ellipsoideis v. subfusoides utrinque attenuatis rectis v. curvis 6-7 transverse septatis saepe etiam longitudinaliter, hyalinis 28-45 \times 7-12. — Ob sporidia hyalina potius ad gen. *Limaciniam* adscribenda et tunc *Lim. Harana* Trott. vocanda.

Hab. in foliis, ramis fructibusque Citri sp. (Rutaceae), Shidz-noka-ken, Japonia.

197. *Meliola Butleri* Syd., in Syd. et Butl. Ann. Mycol. IX, 1911., 4539 p. 379. — Amphigena, plerumque epiphylla; mycelio rugoso-crustaceo, maculas orbiculares atras 2-4 mm. latas v. plagas effuso-confluentes formante; hyphis fusco-brunneis, 7-8 μ crassis; hyphopodiis capitatis oppositis v. alternantibus, 15-20 μ long., cellula superiore 9-10 μ cr., mucronatis oppositis et usque 20 μ long.; setis opacis, 200-500 μ long., 10-11 μ cr., ad apicem 2-4 furcatis; peritheciis numerosis, lenticulari-sphaeroideis, 150-220 μ diam.; ascis fugacibus, 2-sporis; sporidiis cylindræis, utrinque rotundatis, quadrisepatis, leniter constrictis, fusco-brunneis, 33-40 \times 13-17; mycelio conidiophoro velutino, ex hyphis erectis superne valde sinuosis (ut in *Meliola zig-zag*) composito; conidiis triseptatis, fusoides, apice hyalino-papillatis vel attenuatis, 21-46 \times 6-11.

Hab. in foliis Citri medicæ var. acidæ (Rutaceae), Chittagong, Indiae or. (R. SEN), Citri decumanæ, Kya-in Amherst Distr., Burma, Indiae or. (E. J. BUTLER). — A *M. amphित्रίχα* setis furcatis imprimis diversa.

198. *Meliola Galipeae* Syd., Ann. Mycol. 15., 1917, p. 77. — Hypophylla, 4540 plagulas orbiculares, 3-8 mm. diam., atras, velutinas formans; mycelio ex hyphis obscure fuscis 8-9 μ crassis composito; hyphopodiis capitatis numerosissimis, 20-25 μ longis, 10-12 μ latis, integris cellula superiore ovata, inferiore brevi, setis mycelicis numerosissimis, rectis vel parum curvatis, basi saepe geniculatis, tota longitudine opacis vel ad apicem subpellucidis, 220-360 μ longis, 9-10 μ crassis, ad apicem 2-4-furcatis (dentibus erectis variabilibus 3-14 μ longis); peritheciis sparsis, globosis, astomis, tuberculatis, 250-300 μ diam.; ascis bisporis; sporidiis cylindræis, utrinque obtusis, 4-septatis, parum constrictis, fuscis, 42-48 \times 12-17, loculis subaequalibus.

Hab. in foliis *Galipeae longiflorae* (Rutaceae), Serin-
gal S. Francisco Rio Acre, Brasiliae (E. ULE).

199. *Meliola cadigensis* H. S. Yates, Philipp. Journ. Sc. Manila, XII 4541
(1917) p. 363. — Hypophylla, maculas atras 5-8 mm. diam., dein
confluentes et plus minusve effusas efformans; mycelio ex hyphis
septatis 6-7 μ diam. obscure brunneis composito, ramis oppositis
vel irregularibus; hyphopodiis capitatis numerosis, oppositis vel
irregularibus, cellula superiore rotundata, 12-14 μ longa, 10 μ lata,
inferiore 5 μ longa; hyphopodiis mucronatis numerosis, ampullifor-
mibus, usque ad 20 μ longis; setis mycelicis numerosissimis, erectis,
ad basim geniculatis, 450-550 μ longis, 10 μ crassis, atris opacis;
peritheciis numerosis in quaque macula, globosis, tuberculatis, 130-
170 μ diam.; ascis non visis; sporidiis cylindraceis, utrinque late
rotundatis, 4 septatis, ad septa constrictis, obscure brunneis, 35-40 μ
longis, 14-16 μ latis.

Hab. in foliis *Glycosmis cochinchinensis* (Rutaceae)

Mt. Cading, Tayabas Prov. Luzon, Ins. Philipp.

200. *Meliola patens* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1538. — 4542
Mycelio hypophyllo, plagulas velutinas, aterrimas, magnas, 1-2 cm.
longas, discoideas vel irregulares saepeque confluentes efformante,
ex hyphis varie ramosis et intertextis, obscure brunneis, 5-8 μ cr.
composito; hyphopodiis capitatis alternis, bicellularibus, rectis vel
curvulis, 16-22 \times 10-12, cellula superiore ovoidea vel oblonga, ro-
tundata, vix lobata; hyphopodiis mucronatis alternis vel oppositis,
ca. 20-22 μ longis; setis mycelicis numerosissimis, rectis, erectis,
rigidulis, 300 μ usque longis, 8-10 μ crassis, opacis, superne in ra-
mos duos patentes longos (80-150 μ) leniter incurvatos divisus;
ramis iterum semel vel bis in ramulos longiusculos (40-120 μ) ad
apicem plus minusve longe 2-4-furcatos divisus; peritheciis globosis,
rugosis, atris, 200-250 μ diam.; ascis bisporis mox diffluentibus;
sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa con-
strictis, fusco-brunneis, 38-45 \times 15-18.

Hab. in foliis *Lunasiae amarae* (Rutaceae), Puerto Prin-
cesa, Palawan, ins. Philipp. — Affinis imprimis *M. leptideae* Syd.

201. *Meliola Pilocarpi* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4543
II, 1916, p. 509. — Coloniis hypophyllis, irregularibus, 4-15 mm.
diam., atris, mycelio laxo reticulato, ramis oppositis vel alternis,
8 μ diam.; hyphopodiis capitatis alternis, raro oppositis, non cre-
bris, uno pro cellula, cellulis 20-30 μ longis, cellula capitata cy-
lindrica vel leniter incrassata, 20 \times 10, basilari brevi; hyphopodiis

mucronatis plerumque oppositis, ampulliformibus, rostro saepe curvulo, 20×7 ; setis perithecialibus nullis, mycelialibus paucis, sparsis, rectis, atris, 1100μ longis, basi 10μ cr. apice acutatis; peritheciis 190μ diam.; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, valde constrictis, obtusis, $51-54 \times 17-20$.

Hab. in foliis *Pilocarpi racemosi* (Rutaceæ), Mayaguez, Porto Rico.

202. *Meliola Toddaliae* Doidge, Trans. R. Soc. South Afr. V, 1917, 4544 p. 732 et 746, t. 63, fig. 28. — Amphigena, maculas atras velutinas 2-3 mm. diam. efficiens; hyphis fuscis, ramosis $7-10 \mu$ crassis, cellulis $18-25 \mu$ longis, ramis plerumque oppositis, anastomosantibus, hyphopodiis capitatis numerosis, oppositis $18-20 \mu$ long., stipitatis, cellula superiore subovata et leniter curvata, saepe compressa, $14-16 \times 8-11$; hyphopodiis mucronatis non numerosis, simplicibus, rectis demum opacis, plus minusve torulosis, $300-350 \times 8-10$; peritheciis sparsis, in setis mycelicis absconditis, atris, globulosis, verrucosis, $200-250 \mu$ diam.; ascis 3-4-sporis; sporidiis 4-septatis, leniter constrictis, cylindricis, utrinque rotundatis, compressis, $47-55 \times 18-21 \times 14$.

Hab. in foliis *Toddaliae lanceolatae* (Rutaceæ), Kentani, Africa austr. (A. PAGLER).

203. *Meliola obesa* Speg. — Syll. IX p. 421. — Huc ducenda, teste 4545 ipso cl. Spegazzini (Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 43), *M. obesula* Speg. — Syll. XI p. 262 — quae tantum statum senescentem sistit. — In Rutaceis.

204. *Meliola Champereiae* H. et P. Sydow, Ann. Mycol. XII, 1914, 4546 p. 549. — Amphigena, plerumque hypophylla, plagulas minutas orbiculares 2-4 mm. latas aterrimas velutinas formans; mycelio ex hyphis dense intricato-ramosis fuscis $7-9 \mu$ cr. composito; hyphopodiis capitatis numerosissimis, alternantibus v. saepe etiam perfecte oppositis, ovato-oblongis, $20-26 \times 10-14$, cellula superiore ovata rotundata vel rarius lenissime lobulata, inferiore brevi; hyphopodiis mucronatis raris; setis mycelicis numerosissimis, lanceolatis, apice acutis, rectis v. curvatis, $350-470 \times 8-11$, tota longitudine opacis, atris, crasse tunicatis; peritheciis parvis, globosis, astomis, $130-160 \mu$ diam., ascis ovatis, bisporis; sporidiis oblongis v. oblongo-cylindræis, utrinque late rotundatis, fuscis, 4-septatis, parum constrictis, $38-44 \times 15-18$.

Hab. in foliis *Champereiae manillanae* (Santalaceæ), Antipolo prov. Rizal, Ins. Philipp. (M. RAMOS). — *Mel. stenosporae*

Wint. proxima.

205. *Meliola Exocarpi* H. S. Yates, The Philipp. Journ. of Sc., Bot. 4547
13, 1918, p. 368 (*M. Exocarpiæ*). — Amphigena, plagulas orbiculares, 2-8 mm. diam., atras formans; mycelio abundante, ex hyphis castaneis tortuosis anastomosantibus 6-8 μ diam. composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore globosa vel subglobosa et 18-22 μ diam., cellula inferiore 10-18 μ longa, 10-12 μ lata, hyphopodiis mucronatis rarissimis, irregularibus, ampulliformibus, usque ad 22-24 μ longis; setis mycelicis numerosis, rectis, erectis, atris, opacis, vel ad apicem brunneis, apicibus obtusis, 200-250 μ longis, 10-12 μ latis; peritheciis paucis, globosis, verrucosis, atris, opacis, 140-160 μ diam.; ascis non visis; sporidiis cylindraceutis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, 50-55 \times 15-20.

Hab. ad folia *Exocarpi latifolii* (Santalaceæ), Prov. Llocos Norte, Luzon Ins. Philipp. (RAMOS).

206. *Meliola Colladoi* Syd., Ann. Mycol. 18., 1920, p. 98. — Epiphylla, 4548
plagulas primitus minutas sed mox confluentes irregulares tenues formans; mycelium ex hyphis 7-9 μ crassis septatis ramosis compositum; hyphopodia capitata copiosa alternantia, oblonga, 14-18 μ longa, obtusa, integra, superne 7-9 μ lata; hyphopodia mucronata non visa; setae myceliales sat numerosae, rectae, simplices, pelucide brunneae, ad apicem obtusae, 4-6-septatae, 300-600 \times 5-7; perithecia gregaria, 100-150 μ diam., in sicco collapsa; asci 2-3-sporei; sporae oblongae, 4-septatae, vix vel leniter constrictae, utrinque obtusae, 26-34 \times 10-12.

Hab. in foliis *Aryterae* spec. (Sapindaceæ), Mt. Maquiling, prov. Laguna Ins. Philippin. (T. COLLADO).

207. *Meliola Cupaniae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4549
II, 1916, p. 497, fig. 28. — Coloniis epiphyllis, irregularibus, 2-10 mm. diam., confluentibus, diffusis; mycelio plerumque opposito ramoso, laxissime intertexto, 7 μ crasso; hyphopodiis capitatis alternis, 37-70 μ inter se distantibus, cellula capitata ovato-cuneata, aequali vel angulosa, saepe truncata, basilari 7 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus vel conoideis, 20 μ circ. longis; setis mycelialibus nullis, perithecialibus 3-12, rectis vel curvis, apice obtusis, fuscis, 140 \times 5; peritheciis 110-170 μ diam., ob papillulas rotundatas scabris; ascis citò evanidis; sporidiis 4-septatis, brunneis, cylindraceutis, leniter constrictis, obtusis, 37 \times 14.

Hab. in foliis *Cupaniae americanae* et *Cup. sp.* (Sapindaceae), Porto Rico. — Mycelio sparso, hyphopodiis distantibus, longis, angustis praecipue distincta species.

208. *Meliola araneosa* Syd. in Leaflets of Philipp. Bot. VI (1913), 4550 p. 1922. — Mycelio epiphylllo, maculas parum conspicuas, 2-7 mm. latas, saepe confluentes et totum folium occupantes formante, laxo, araneoso, ex hyphis elongatis parum ramosis, flexuosis, 4,5-6 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, continuis vel cellula brevissima stipitiformi plerumque vix conspicua suffultis, cellula superiore perfecte globosa vel subglobosa, 9-11 μ altis et latis, haud lobatis nec truncatis; hyphopodiis mucronatis alternis vel oppositis, lageniformibus vel subampulliformibus, 18-22 μ longis, rectis; setis mycelicis nullis; peritheciis laxè dispositis, globosis, 110-150 μ diam., in sicco collapsis, contextu e cellulis 9-11 μ longis composito, setulis paucis usque ad 100 μ longis, 8-9 μ crassis, 2-4-septatis, dilute fuscis, rectis vel subrectis, simplicibus, apice late rotundatis obsitis; ascis ovatis, 2-3-sporis; sporidiis oblongis, 4-septatis, ad septa constrictis, utrinque obtusis, fuscis, 35-38 \times 11-15.

Hab. in foliis vetustis *Guioae microcarpae* (Sapindaceae), Cabadbaran, Mindanao, ins. Philipp. — *M. aciculosa* Wint. valde proxima sed hyphopodiis alienis.

209. *Meliola lepisanthæa* Sacc., Notae Mycol. XXIII p. 61 (Accad. Ven. Trent. 1917). — Plagulis epiphyllis, raro hypophyllis, irregularibus, confluentibus et maculas 1-3 cm. formantibus, ex olivaceo nigricantibus; hyphis radiantibus, ramosis, fuligineis, utrinque hyphopodiis capitatis typicis praeditis; hyphopodiis mucronatis non observatis; peritheciis globosis, astomis, 90-110 μ diam., contextu fuligineo; sporidiis cylindræis, utrinque rotundatis, 4-septato-constrictis, 30-38 \times 10-11,5, badio-fuligineis; setis copiosis interspersis, cuspidatis, curvatis, 250-300 \times 7, obsolete septatis aterrimis, basi saepe bulbillosis.

Hab. in foliis *Lepisanthis sp.* (Sapindaceae), Los Baños, Ins. Philipp. — Est e typo *Mel. amphitrichae* sed sporidia minora etc. Adest supra *Meliolam*, verisimiliter parasiticum, *Stemphylium muriculatum*, de quo cfr. suo loco.

210. *Meliola Hessii* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4552 1916, p. 527, fig. 52. — Coloniis epiphyllis, irregulariter discoidalibus, 2-3 mm. diam., in senectute centro denudatis; mycelio rectiusculo, dense reticulato-contexto, ramis plerumque oppositis, 7 μ

diam.; hyphopodiis capitatis oppositis, crebris, $17\ \mu$ circ. inter se distantibus, cellula capitata piriformi 10×7 , basilari $3\ \mu$ longa; hyphopodiis mucronatis oppositis, ampulliformibus; setis perithecialibus nullis, mycelialibus erectis, rigidis, non vere copiosis, sat uniformibus, 190×8 , apice 1-2-3-dichotomo-ramosis, ramis brevibus, subrectangularibus, $15\ \mu$ circ. longis; peritheciis $150\ \mu$ diam., minute scabris; ascis cito diffluentibus, 4-sporis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 41×14 .

Hab. in foliis *Paulliniae pinnatae* (Sapindaceae), Sabano-Llana et Mayaguez, Porto Rico.

211. *Meliola Stevensii* Beeli, Bull. Jard. Bot. État Bruxelles, v. 7, 4553 1920, p. 98. — Amphigena, maculas orbiculares nigras velutinas 5-15 mm. diam. efformans; mycelio radianti, hyphis brunneis copiose ramosis; pallide brunneis, $30-36 \times 7-8$; hyphopodiis capitatis alternis v. unilateralibus $14-22 \times 12$, cellula superiori subgloboso-ovata, inferiori brevi; hyphopodiis mucronatis oppositis; setis mycelicis numerosis sparsis supra mycelium et sub peritheciis positis, brunneis pellucidis, rectis septatis simplicibus ad apicem obtusis, $240-300 \times 5-6$; peritheciis numerosis verrucosis atris, depresso-niduliformibus obscure brunneis, $150\ \mu$ diam., circa centrum macularum positis; ascis evanescentibus; sporidiis 4-septatis brunneis cylindraceis ad septa constrictulis, apice obtusis v. parum attenuatis, $34-35 \times 12-15$.

Hab. in foliis *Sapindaceae* ejusdam, Wombali, Congo, Africa trop. (VANDERYST). — Proxima *M. laxae* et *M. alienae*, sed differt maculis magis regularibus, setulis pellucidis.

212. *Meliola Bomplandi* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4554 Buenos Aires XXIII p. 39 (1912). — Caespitulis saepius epiphyllis, irregulariter orbicularibus, 1-5 mm. diam., laxissime fibrillosis et siccando facillime deciduis, atris; hyphis laxae intertextis, repentibus, rectiusculis, $6-8\ \mu$ cr., subopace fuligineis, opposite ramosis, dense hyphopodiatis; bicellularibus, e cylindraceo subconicis, obtusis, oppositis, leniter antrorsis, $10-14 \times 6-8$, cellula supera conoidea et saepe subuncinato-incurva, opace fuliginea; peritheciis paucis e globoso sublenticularibus $150-180\ \mu$ diam., glabris, papillulosis, astomis, non vel vix collabescentibus, coriacellis, atris, contextu opaco indistincto; ascis non visis; sporidiis ellipsoideis, utrinque leniter attenuatis rotundatisque, 28×18 , quadriseptatis, ad septa modice constrictis, cellulis omnibus subaequalibus grosse 1-guttulatis, e latere leniter compressis, pallide fuligineis.

Hab. in foliis *Sapindi saponariae* (Sapindaceae), in nemoribus prope Bompland, Misiones: Argentina.

213. *Meliola Serjaniae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4555 II, 1916, p. 512, fig. 42. — Coloniis hypophyllis, irregularibus, atris, 1-6 mm. diam., hyphis 6 μ cr., irregulariter ramosis, laxe reticulato-contextis; hyphopodiis capitatis minutis, alternis vel irregularibus, 40-70 μ inter se distantibus, cellula capitata ovoidea vel piriformi et valde lobata, 17 \times 10, basilari 3-6 μ longa; hyphopodiis mucronatis plerumque copiosioribus, oppositis, e ampulliformibus conoideis, angustis, 24 \times 6; setis perithecialibus nullis, mycelialibus copiosis, rectis vel leniter curvis, ubique atris, apice abrupte acutatis, 280-300 \times 10; peritheciis 150-190 μ diam.; ascis mox evanidis; sporidiis 4-septatis, brunneis, constrictis, obtusis, 41 \times 17.

Hab. in foliis *Serjaniae polyphyllae* (Sapindaceae), Porto Rico. — A caeteris speciebus in Sapindaceis plane recedens.

214. *Meliola Dipholidis* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4556 II, 1916, p. 512. — Coloniis amphigenis, irregulariter circularibus, 2-5 mm. diam.; mycelio atro, ramis plerumque oppositis, laxe contexto, 7 μ crassis; hyphopodiis capitatis minutis, alternis vel irregulariter sparsis, non crebris, uno pro cellula, cellulis 27 μ circ. longis, cellula capitata obovoidea, piriformi vel globulosa, saepe angulosa vel curvata, 17 \times 10, basilari 5-7 μ longa; hyphopodiis mucronatis alternis vel oppositis e cuneatis ampulliformibus, 18 \times 7; setis perithecialibus nullis, mycelialibus paucis, rectis vel leniter curvis, 400 \times 7, ubique fuscis, apice acutis; peritheciis 110-150 μ diam., tenuiter scabris; ascis bisporis, mox evanescentibus; sporidiis 4-septatis, brunneis, cylindraceo-ellipsoideis, medio incrassatis, ad septa valde constrictis, obtusis, 41-44 \times 18.

Hab. in foliis *Dipholidis salicifoliae* (Sapotaceae), Guayanilla et Quebradillas, Porto Rico. — A *M. amphitricha* differt hyphopodiis capitatis sporidiisque alienis, a *M. brasiliensi* characteribus sporidiorum et setarum.

215. *Meliola Lucumae* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4557 1916, p. 517, fig. 47. — Coloniis amphigenis, in hypophyllo latio-ribus, irregulariter circularibus, 2-10 mm. diam., diffusis; mycelio laxe reticulato contexto, hyphis 7 μ cr., plerumque opposite ramoso; hyphopodiis capitatis alternis, distantibus, uno in quaque cellula, cellulis 35 μ circ. longis, cellula capitata cylindrica vel utrinque leniter attenuata, 17 \times 7, basilari 3 μ longa; hyphopodiis mucro-

natis paucis, plerumque oppositis, subconicis, circ. 20×4 ; setis perithecialibus nullis, mycelialibus paucis, leniter curvis, $200-800 \times 7$, ubique fuscis, apice obtusis; peritheciis $100-150 \mu$ diam., ob papillulas rotundatas scabris; ascis mox evanidis; sporidiis 4-septatis, pallide brunneis, leniter constrictis, obtusis, 44×18 .

Hab. in foliis *Lucumae multiflorae* (Sapotaceae), Las Marias, Porto Rico. — Mycelio sparso, diffuso, hyphopodiis capit. cylindraceis, mucronatis parum distinctis consociatis distinguenda species.

216. *Meliola Peglerae* Doidge, Trans. R. Soc. Soyth. Afr. V, 1917, 4558 p. 730, t. 63 f. 24. — Epiphylla, subcrustacea, nigra, colonias orbiculares 1.3 mm. diam., interdum confluentes formans; hyphis septatis ex cellulis $8-14 \times 7-9$ umbrinis formatis, ramulis anastomotiscis; hyphopodiis capitatis numerosis alternis v. unilaterialibus, breviter stipitatis, cellulis basalibus $7 \times 4-7$, terminalibus obovoideis, saepe curvis, $14-18 \times 7-11$; hyphopodiis mucronatis paucis oppositis, ampulliformibus $14-22 \times 7$; setis mycelialibus nullis; peritheciis in centro coloniae confertis, nigris $126-233 \mu$ diam., cellulis superficiei mamillatis; ascis 2-4-sporis, evanidis; sporidiis oblongis utrinque rotundatis, 4-septatis, ad septa leniter constrictis, $29-43 \times 16-18$.

Hab. in foliis *Anastibes integerrimae* (Srophulariaceae), et fruticis indeterminati, Kentani et pr. Durban, Africae austr. (A. PEGLEE et WOOD).

217. *Meliola capsicicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4559 II, 1916, p. 509, fig. 39. — Colonis amphigenis, circularibus, 1.3 mm. diam., atris; mycelio densissime reticulato contexto, hyphis 7μ crassis, sinuosis, irregulariter ramosis; hyphopodiis capitatis alternis, non crebris, uno pro cellula, cellulis $20-30 \mu$ longis, cellula capitata forma et magnitudine irregularissima, basilari saepe elongata; hyphopodiis mucronatis paucis, sparsis, phialiformibus, irregularibus, 20×7 ; setis perithecialibus nullis, mycelialibus copiosis, rectis vel leniter curvis, 265×10 , apice acutis, ubique fuscis; peritheciis 170μ diam., scabriusculis; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 41×14 .

Hab. in foliis caulibusque *Capsici baccati* (Solanaeeae), Manati et Dos Bocas, Porto Rico. — Species praecipue ob irregularitatem hyphopodiorum eximie distincta.

218. *Meliola Cestri* L. R. Tehon, Bot. Gazette, 67., 1919, p. 505. — 4560 Colonis epiphyllis irregulariter circularibus 1.3 mm. diam.; mycelio obscuro, dense reticulato, hyphis $9-10 \mu$ cr. formato; hypho-

podii capitatis oppositis, phylaeformibus 24-28 \times 9; setulis perithecialibus nullis, mycelialibus numerosis, rectis, nigris, 650-850 \times 10-11, apice obtusis; peritheciis numerosis, centro aggregatis, juventute corona hypharum circumdatis, levibus, 225-275 μ diam.; ascis mox evanidis; sporidiis 4-septatis, obscure brunneis, cylindraceis 50-55 \times 18-20, maturis ad septa constrictis.

Hab. in foliis *Cestri* sp. (Solanaceae), Mayaguez, Porto Rico. —

A *M. Geenerii* Stev. quaque in *Cestro* omnino diversa.

219. *Meliola Henningsii* Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 4561
1920, p. 100. — Ita vocanda est *Mel. solanicola* Henn. 1900 non
Gail 1892.

220. *Meliola Solani* Stevens, Mel. Porto Rico in Illin. Biol. Monogr. 4562
II, 1916, p. 15, fig. 7. — Coloniis amphigenis, irregulariter circularibus, 2-4 mm. diam.; mycelio atro, dense reticulato, 7 μ diam., irregulariter ramoso; hyphopodiis capitatis minutis, plerumque oppositis, haud crebris, in quaque cellula binis, cellulis 17 μ circ. longis; cellula capitata pyriformi vel globulosa 10 \times 8, basilari brevi; hyphopodiis mucronatis paucis, alternis vel oppositis, ampulliformibus, 14 \times 7; setis mycelialibus nullis, perithecialibus paucis vel nullis, rectis vel leviter incurvis, 125 \times 7, obtusis, atris; peritheciis, 150-180 μ diam.; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37 \times 14.

Hab. in foliis *Solani jamaicensis* (Solanaceae), Monte d'Oro, Porto Rico. — Hyphopodiis capitatis minutis, subglobosis, saepius oppositis praecipue distincta.

221. *Meliola laeta* Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 24, 4563
fig. 3. — Plagulae dense sparsae, 2-3 mm. latae, opace nigrae. Hyphae mycelii alterne ramosae, graciles, 5,5-6,5 μ crassae, fuliginellae, glaberrimae, cellulis elongatis, 30-35 μ longis, setae nullae. Hyphopodia capitata concolora, pedicello cylindrico brevissimo (3-4 μ), capitulo ovato vel globoso integro recto 10-12 μ lato; hyphopodia mucronata alterna, saepe geminata, ampulliformia, curvata. Perithecia 220 μ diam., applanato-globosa, nigra, verrucosa, e cellulis magnis angulosis ca. 22 μ latis contexta (cellulae fuligineae, membrana exterior nigra et crassiore, circa pseudo ostiolum subconcentrice ordinatae). Asci bispori 55 \times 25. Sporae brunneae, cylindraceae, rectae, rarius curvulae, 4-septatae, leniter ad septa constrictae, 48 \times 17, cellulis aequalibus.

Hab. epiphylla in foliis *Solani* (?) sp. (Solanaceae), S. Leopoldo, Brasiliae meridionalis (J. RICK).

222. *Meliola oligomera* Syd., Ann. Mycol. 15., 1917, p. 190. — Amphigena, 4564
 plerumque epiphylla, pelliculosa, leniter velutina, aterrima, plagulas irregulares tandem confluentes et plus minus effusas saepe totam folii superficiem occupantes formans; mycelium ex hyphis dense intertextis copiose ramosis anastomasantibusque castaneo-brunneis 6-8 μ crassis septatis formatum; hyphopodia capitata numerosissima, irregularia, alternantia, 20-25 μ longa, cellula superiore semper valde irregulariterque lobata et 10-18 μ lata, inferiore stipitiformi anguste cylindracea; hyphopodia mucronata rara, setae myceliales copiosae, rectae vel subrectae, tota superficie opacae, simplices, ad apicem acutatae 200-250 μ longae, ad basim 8-10 μ crassae; perithecia gregaria, globosa, in sicco collapsa 150 200 μ diam.; asci mox diffuentes; sporae cylindraceae 3-septatae, leniter constrictae, utrinque rotundatae, cellulis fere aequalibus, 40-44 \times 12-14, castaneo-brunneae, in maturitate subopacae.

Hab. in foliis *Turpiniae* sp. (? *Staphyleaceae*), Rizal, Luzon Ins. Philipp. (M. RAMOS).

223. *Meliola styracicola* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4565
 Buenos Aires XXIII p. 44 (1912). — Caespitulis orbicularibus, evanescentibus, 3-10 mm. diam., amphigenis, arcte adnatis, non deciduis, parciissime setulosis; hyphis repentibus circa perithecia alterne geniculato-denticulatis ut in *M. zig-zag*, ceteris irregulariter ramosis, 6-8 μ cr.; hyphopodiis paucis, alternis, lageniformibus vel conoideis; setulis erectis, 100 200 \times 5 8, opace fuligineis, fragilibus, subdeciduis, apice integris et conidium fusoideum 3-septatum vel 4-5-blastum 30-40 \times 8-9, olivaceum gerentibus; peritheciis globosis, glabris, subcarbonaceis, astomis, non collabentibus, 150-250 μ diam., grosse verrucosis; ascis ovatis, 2-3-sporis, mox diffuentibus; sporidiis subfusoideis vel cylindraceo-ellipsoideis, e latere compressis, 58-60 \times 20-24 \times 16-18, 4-septatis, vix constrictis, opace fuligineis, loculo centrali conspicue majore.

Hab. in foliis vivis *Styracis leprosa* (*Styracaceae*), in silvis prope Puerto León, Misiones: Argentina.

224. *Meliola Celtidiae* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4566
 13., 1918, p. 367. — Hypophylla, atra, velutina, maculas orbiculares, 1-2 cm. diam. efformans; mycelio ex hyphis brunneis septatis tortuosis anastomosantibus radiantibus 10-12 μ crassis composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore globosa, 15-18 μ diam. vel lobata et 12-20 μ longa, 10-25 μ lata; hyphopodiis mucronatis numerosis, irregularibus, ampullifor-

mibus, usque ad 20-30 μ longis; setis rectis, erectis, ad basim geniculatis, 800-1200 μ longis, 20-25 μ crassis, atris, opacis, obtusis; peritheciis numerosis, atris, opacis, tuberculatis, globosis vel applanatis, 175-225 μ diam.; ascis evanescentibus; sporidiis obscure fuscis, oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, 50-55 \times 15-20.

Hab. ad folia *Celtidis luzonensis* (Ulmaceae), Catubig River Samar, Ins. Philipp. (RAMOS).

225. *Meliola celticola* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4567
13., 1918, p. 366. — Amphigena, maculas atras, pelliculosas, orbiculares, 2-4 mm. diam.; vel confluentes efformans; mycelio ex hyphis dense intertextis brunneis 7-8 μ cr. ramosis et anastomosantibus composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore angulata vel irregulari, 20-25 μ diam., cellula inferiore 10 μ longa, 4-5 μ lata; hyphopodiis mucronatis numerosis, plerumque alternantibus, ampulliformibus, 20-30 μ longis; setis myceliis paucis, atris, opacis, ad apicem uncinatis, acutis, rarius obtusis 250-350 μ longis, 6 μ crassis, peritheciis numerosis, globulosis, atris, verrucosis, 150-225 μ diam.; ascis bisporis, evanescentibus; sporidiis cylindræis, castaneo-brunneis, 4-septatis, ad septa constrictis, utrinque late rotundatis, 45-50 \times 17-19.

Hab. ad folia *Celtidis philippinensis* (Ulmaceae), Bangui, Prov. Llocos Norte, Luzon, Ins. Philipp. (RAMOS).

226. *Meliola Tremæ* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII p. 45 (1912). — Caespitulis amphigenis, saepius epiphyllis, orbicularibus vel confluenti-diformibus, 1-5 mm. diam., arcte adnatis, non deciduis, atris, tenuiter membranaceo-araneosis; hyphis repentibus irregulariter intertextis, rectiusculis, 8-10 μ cr., fuliginæis, oppositè ramosis; hyphopodiis laxis, saepius alternis, clavulatis vel sublageniformibus, 20-25 \times 12-14, subopacis; setis nullis; peritheciis gregariis, subhemisphaericis, astomis, basi subapplanatis, grosse verrucosis, 150-200 μ diam.; ascis ellipsoideis, 60-65 \times 20-25, bisporis, mox diffuentibus; sporidiis e latere subellipticis, e fronte cylindræis, 4-septatis, vix constrictis; 40-44 \times 16-18, primo tunica mucosa tenui obvolutis, fuliginæis, serius nudis, atro-opacis, loculo centrali nonnihil majore.

Hab. in foliis vivis *Tremæ micranthæ* (Ulmaceae), in silvis prope Puerto León, Mision : Argentina.

- 227 *Meliola Leucosykes* A. S. Yates, Philipp. Journ. Sc. Manila, XII 4569
(1917) p. 366 (*M. Leucosykeæ*). — Epiphylla, plagulas atras, orbi-

culares, 4-8 mm. diam. formans; mycelio sparso, ramis oppositis vel irregularibus, ex hyphis brunneis, septatis 7-8 μ latis composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore subglobosa, 10 μ longa, 12-14 μ lata; cellula inferiore 5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, 10-15 \times 4-7; setis mycelicis numerosis 300 μ longis, ad basim ad 8 μ latis, erectis, rectis vel leviter curvatis, inferne atris, opacis, apicem versus dilutiores brunneis, obtusis; peritheciis globosis, 230-260 μ diam., tuberculatis, ascis oblongis, 60-70 \times 25-30, 6-8 sporis; sporidiis 3-septatis ad septa non constrictis, utrinque late rotundatis, fuscis, 35-40 μ longis, 14-16 μ latis.

Hab. in foliis *Leucosykes capitellatae* (Urticaceae), Catubing River, Samar Ins. Philipp.

228. *Meliola Earlii* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4570 1916, p. 515, fig. 45. — Coloniis amphigenis, irregularibus, 1-4 mm. diam., hyphis undulatis, irregulariter ramosis, saepe ad hyphopodia angulatis, 6 μ diam., laxe reticulato-contextis; hyphopodiis capitatis minutis, alternis, non confertis, 25 μ circ. inter se distantibus, ovatis vel piriformibus, interdum angularibus vel curvis, 10 \times 8, cellula basilari brevi; hyphopodiis mucronatis paucis, ampulliformibus; setis perithecialibus nullis, mycelialibus paucis vel copiosis, 160 μ circ. longis, rectis vel leniter curvis, opacis, apice acutis; peritheciis 160 μ diam., scabris ob papillulas rotundatas, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, subconstrictis, obtusis, 35-40 \times 10.

Hab. in foliis *Pileae* sp. (Urticaceae), Porto Rico — *Socia* adest *M. triloba*, a qua tamen species haec facile dignoscitur.

229. *Meliola sepulta* Pat. ap. Stevens, Mel. Porto Rico in Illin. biol. Monogr. II, 1916 p. 482, fig. 5. — Coloniis circularibus, 1-7 mm. diam., atris, densis, plerumque hypophyllis, mycelio crebre ramoso-reticulato; hyphopodiis capitatis, 24 \times 14, oppositis vel alternis, cellula capitata angulari vel saepe distincte lobata, basilari 10 μ longa; setis mycelialibus et perithecialibus nullis; peritheciis in partibus coloniae vetustioribus copiosis, 170 μ diam., tenuiter scabris; ascis evanidis, brevibus, crassis, 2-4-sporis; sporidiis 52 \times 20, 4-septatis, valde constrictis, utrinque obtusis.

Hab. in foliis *Avicenniae nitidae* (Verbenaceae), Porto Rico.

230. *Meliola vilis* Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1926. — 4572 Mycelio epiphylo, effuso, tenuissimo, parce conspicuo, ex hyphis

longiusculis, ramosis, fuscis, 6-8 μ crassis composito; hyphopodiis capitatis alternantibus, bicellularibus, apice obtusis, 18-24 \times 10-12; hyphopodiis mucronatis oppositis 18-25 μ longis; setis nullis; peritheciis sparsis, globosis, 80-130 μ diam., rugulosis, atris; ascis ovatis, 2-3-sporis; sporidiis oblongis, utrinque obtusis, 4-septatis, ad septa constrictis, fuscis, 34-40 \times 13-16.

Hab. in foliis vetustis *Callicarpæ Blancoi* (Verbenaceae), Cabadbaran, Mindanao, ins. Philipp. — *A. M. Callicarpæ* Syd. recedit setarum defectu, hyphopodiis non oppositis et sporidiis latioribus.

231. *Meliola Callicarpæ* P. et H. Syd., Ann. Mycol. X, 1912, p. 80. — 4573

Mycelio epiphylo, laxo, ex hyphis repentibus fuscis 5-6 μ cr. composito; hyphopodiis oppositis v. alternantibus, sessilibus, oblongis 9-13 μ long.; setulis mycelii erectis, rectis, septatis, simplicibus, usque 400 μ long. 9-10 μ cr.; peritheciis globosis, tuberculatis, atris, 90-120 μ diam.; ascis 30-45 \times 20-30, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, fuscis, 28-32 \times 9-11.

Hab. in foliis *Callicarpæ canae* (Verbenaceae), prope Manila, Ins. Philippin. (E. D. MERRILL).

232. *Meliola sakawensis* Henn.—Syll. XVII, p. 548 — var. *longispora* 4574

Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 98. — *A* typo differt setis mycelicis 250-300 \times 8, sporidiis majoribus 36-38 \times 14.

Hab. epiphylla in foliis *Clerodendri* sp. (Verbenaceae), Wombali, Congo, Africae trop. (VANDERYST).

233. *Meliola micromera* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 552. — 4575

Amphigena, plagulas tenuissimas effusas parum perspicuas formans; mycelio ex hyphis subrectis v. flexuosis subinde subtorulosis 6-8 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, 12-16 μ long. 9-10 μ latis, cellula superiore rotundata ovata v. ovato-globosa; hyphopodiis mucronatis raris; setis mycelicis sparsis haud numerosis, brevibus, 150-200 \times 6-7, apice semper obtusis, subrectis, flexuosis v. varie curvatis, saepe subfalcatis, obscure brunneis, subpellucidis usque opacis, crasse tunicatis; peritheciis sparsis, globosis, astomis, 100-150 μ diam.; ascis ovatis, 2-4-sporis; sporidiis breviter cylindraceis, utrinque obtusis, 4-septatis, non v. parum constrictis, sordide fuscis, 25-28 \times 10-13.

Hab. in foliis *Gmelinae philippinensis* (Verbenaceae), Angat prov. Bulcan, Ins. Philippin. (M. RAMOS).

- 234 *Meliola Lantanae* Syd. ap. Fuhrmann et Mayor, Voy. Expl. scient. 4576

Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 434 (1913). — My-

celio amphigeno, maculas orbiculares vel irregulares, 1-3 mm. latas, tenues, saepe confluentes, modice manifestas efficiente, ex hyphis dense intertextis anastomosantibusque, subtorulosis, obscure fuscis, 7-10 μ cr. composito; hyphopodiis capitatis modice copiosis, plus minus longe stipitatis, totis 20-28 μ longis, 9-12 μ latis, cellula superiore ovata vel ovato-globosa; hyphopodiis mucronatis raris, 20 μ usque longis; setis mycelicis sparsis, rectis, erectis, rigidis, apice obtusis, septatis, usque ad 450 μ longis, 6-8 μ cr., inferne saepe opacis, superne translucidis; peritheciis globosis, astomis, tuberculatis, atris, minutis, 80-200 μ diam., in sicco collapsis; ascis ovatis, 40-45 \times 10-25, bisporis; sporidiis oblongis, 4-septatis, ad septa constrictis, utrinque rotundatis, fuscis, 34-40 \times 10-14.

Hab. in foliis *Lantanae hispidae* (Verbenaceae), in regione andina prope Angelopolis, Columbia, alt. 1600-2000 m. — Affinis *M. ambiguae* a qua differt praecipue peritheciis minoribus, et *M. microspora* a qua sporidiis et hyphopodiis capitatis majoribus recedit.

235. *Meliola callista* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. 4577 Botany VI (1914) p. 2191. — Mycelio epiphylo plagas circulares arachnoideas, 8-10 mm. latas, demum confluentes, nigridulas efformante, ex hyphis parce ramosis, septatis, 5-6 μ cr. efformato; hyphopodiis capitatis sparsis, alternis, 2-cellularibus, cellula inferiore cylindracea, superiore globulosa, interdum recurvata, 20-25 \times 12, hyphopodiis mucronatis nonnullis 12 \times 7; setis mycelialibus paucis, erectis, obtusis, 200 \times 5-6; peritheciis in centro mycelii sparsis, globosis, astomis, nigris, glabris, 200 μ diam. levibus, exappendiculatis; ascis primo cylindraceis 80-100 \times 18, dein ovatis 80 \times 35, octosporis; paraphysibus ramosulis, septatis, 4 μ cr.; sporidiis distichis, subclavatis, utrinque obtusis, 3-septatis, non constrictis, fuscis, 30-35 \times 12-14. — Mycelium obsessum filamentis erectis, crassis, nigris, 2 mm. usque altis, ad basim circ. 50 μ latis, ex hyphis parallelis, fuscis, septatis, 0,4 μ circ., arcte conglutinatis contextis, supra medium filamenti sensim ramosè secedentibus, ad apicem plane dissolutis, obtusis, plerumque recurvatis, dilutioribus, condium gerentibus. Conidia fusiformia, obtusa, flavo-fusca, 4-6-septata, non constricta, in pedicellum elongata, 45-50 \times 8-9.

Hab. ad folia *Premnae odoratae* (Verbenaceae), Luzon, Prov. Laguna, Los Baños (S. A. REYES).

236. *Meliola aciculosa* Wint. — Syll. IX p. 421. — var. *Viticis* Rehm, 4578 Ascomyc. Philipp. VI, Leaflets of Philipp. Botany, VI (1914) p. 2257.

A typo recedit tantum mycelio obscure fusco arete compresso.

Hab. ad folia Viticis Negundinis (Verbenaceae), Los Baños, ins. Philipp. (S. A. REYES).

237. *Meliola rizalensis* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 551. — 4579

Plerumque epiphylla, indeterminata, confluens, saepe totam folii superficiem irregulariter occupans, subpelliculosa; mycelio ex hyphis castaneo-brunneis fere rectangulariter ramosis $7-9\ \mu$ cr. composito; hyphopodiis capitatis numerosis, alternantibus integris, $12-18 \times 10-12$, cellula superiore globulosa v. late ovata, inferiore brevi v. brevissima; hyphopodiis mucronatis non visis; setis mycelicis per raris, castaneo-brunneis, subopacis, ad apicem obtusis, simplicibus, rectis, $100-175 \times 6-9$; peritheciis dense sparsis, globosis, minute ostiolatis, hand tuberculatis, $130-160\ \mu$ diam.; ascis ovatis, 2-3 sporis; sporidiis ellipsoideo-oblongis v. oblongis, 4-septatis, parum constrictis, castaneo-brunneis, $26-36 \times 10-15$.

Hab. in foliis Viticis parviflorae (Verbenaceae), Antipolo prov. Rizal, Ins. Philippin. (M. RAMOS).

238. *Meliola macrochaeta* Syd. in Leaflets of Philipp. Bot. V (1912) 4580

p. 1538. — Mycelio hypophyllo, tenuissimo, effuso, plagulas tenues, discoideas vel subdiscoideas, $0,5-1,5$ cm. latas, subinde confluentes efformante; hyphis longissimis, $8-10\ \mu$ crassis, remote septatis, laxe ramosis (ramis plerumque longiusculis) obscure brunneis composito; hyphopodiis mucronatis alternis vel oppositis, e basi lata apicem versus acute tenuatis, $22-38\ \mu$ longis, basi $8-10\ \mu$ cr., fuscis; hyphopodiis capitatis alternis, clavatis, rectis vel curvulis, distincte 3-5 cellularibus, $30-40 \times 14-18$; setis mycelicis nullis; setis perithecialibus longissimis, usque ad $900\ \mu$, $11-16\ \mu$ crassis, atris, opacis, rigidis, apice bidentatis, dentibus usque ad $15\ \mu$ longis; peritheciis in mycelio sparsis, depresso globosis, valde rugosis, atris, $175-225\ \mu$ diam.; ascis late ovatis, bisporis, mox diffluentibus; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, $45-52 \times 16-18$, obscure brunneis.

Hab. in foliis vetustis Alsodeiae formicarum (Violaceae), Puerto Princesa, Palawan, ins. Philipp. — Setis perithecialibus perlongis et hyphopodiis majusculis pluricellularibus eximie distincta.

239. *Meliola Merrillii* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. 4581

of Sci. VIII (1913) p. 479. — Epiphylla, subpelliculosa, atra, velutina, primitus maculas 2-8 mm. diam. formans, dein confluens et plus minusve effusa; mycelio ramoso, anastomosante, fusco-brun-

neo, ex hyphis septatis 8-10 μ crassis composito; hyphopodiis capitatis numerosis, alternis, 20-26 μ longis, cellula basali brevi, superiore globulosa vel lenissime lobata, crassa, 11-14 μ lata; hyphopodiis mucronatis rarioribus, oppositis, ampulliformibus, usque ad 24 μ longis; setis mycelicis numerosissimis, erectis, basi geniculatis, 160-220 \times 9-11, septatis, opacis vel subopacis, superne in ramos duos patentes, 35-70 μ longos divisas, ramis ad apicem sive tantum bi-tridentatis, dentibus 3-10 μ longis, sive rarius iterum in ramulos duos divisas et ramulis his ad apicem breviter 2-3-dentatis; peritheciis sparsis, globosis, levibus, 140-175 μ diam.; ascis ovatis 2-3-sporis, fugacibus; sporidiis oblongis, 4-septatis, ad septa constrictis, fuscis, utrinque late rotundatis, 34-38 \times 12-14.

Hab. in foliis vivis *Cissia adnatae* (Vitaceae), Luzon, Prov. Laguna, Mt. Maquiling, ins. Philipp. (MERRILL). — Affinis *M. patienti* Syd. a qua differt habitu alieno, peritheciis minoribus non rugosis sporidiisque angustioribus.

240. *Meliola varia* Doidge, Trans. R. Soc. South. Afr. V, p. 738 et 458: 747, t. 65 fig. 40. — Amphigena, plagulas minutas, atras, 1-2 mm. diam., efficiens; hyphis sinuatis, irregulariter 7-9 μ crassis, brunneis, cellulis 18-25 μ long., compositis; ramis plerumque alternis v. unilateralibus; hyphopodiis capitatis remotis, non numerosis, alternis v. unilateralibus, 21-35 μ long., cellula superiore ovato-globosa 14-15 \times 10,5-12; hyphopodiis mucronatis rarissimis, pallidioribus ca. 11 \times 5-6; setis mycelicis numerosis, 180-226 μ longis erectis, rigidis, stipite opaco, simplice, 160-190 \times 10; superne ramosis, pellucidis, aliis in ramos ternos breves (ca. 18 μ) apice bifurcatos divisas, aliis in ramos duos (18-30 \times 8) patentes divisas, ramis iterum in ramulos duos v. ternos, globosis, in sicco leniter collapsis, verrucosis, 160-180 μ diam., ascis non vivis; sporidiis 4-septatis, ad septa vix constrictis, cylindricis utrinque rotundatis, 45-50 \times 15-18.

Hab. in foliis *Cissia rhomboideae* (Vitaceae), Winter's Kloof, Natal, Africa austr. (E. M. DOIDGE).

241. *Meliola amomicola* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 458: II, 1916, p. 508, fig. 37. — Coloniis plerumque hypophyllis, atris, circularibus vel irregularibus, diffusis, 5-15 mm. diam.; mycelio sat dense contexto, subcompacto, ex atro pallide stramineo, ramis ut plurimum oppositis, 6 μ crassis; hyphopodiis capitatis plerumque oppositis, binis in quaque cellula, cellulis 24 μ circ. longis; cellula capitata cylindrica, recta vel curva, basilaris vix crassiore,

cellula basilari 2-4 μ longa; hyphopodiis mucronatis sparsis, ampulliformibus, 24 \times 6; setis perithecialibus nullis, mycelialibus sparsis, longis, 900-1000 \times 10, basi incrassatis, ubique atris, acutis; peritheciis sparsis, 186 μ diam.; sporidiis 15 \times 17, valde constrictis, obtusis.

Hab. in foliis *Amomum caryophyllatae* (Zingiberaceae), Mayaguez, Porto Rico.

242. *Meliola aibonitensis* Stev., Mel. Porto Rico in Ill. Biol. Monogr. 4584

II, 1916, p. 484. — Coloniis amphigenis, atris, circularibus dein irregularibus, 1-3 mm. diam.; mycelio densuscule contexto, contorto, undulato, irregulariter ramoso; hyphopodiis capitatis alternis vel unilateralibus, inter se sat proximis, saepe 17 μ , cellula capitata subglobulosa, 10-15 μ diam., basilari brevi; hyphopodiis mucronatis sparsis, e ampulliformibus conicis; setis mycelialibus et perithecialibus nullis; peritheciis in juventute saepeque etiam in maturitate applanatis, areola myceliali radiatim cinctis, scabriusculis, 140 μ diam.; sporidiis 4-septatis, 14 \times 17, obtusis, leniter constrictis.

Hab. in foliis *Dicotyledoneae* quaedam haud determinatae, Aibonito, Porto Rico.

243. *Meliola leopoldina* Theiss., Broteria, Bot., v. XII, 1914, fasc. I, 4585

p. 25. — Plagulae myceliales epiphyllae, minutae, 2 mm. diam., opacae; peritheciis paucis. Hyphae mycelii oppositae vel alternae ramosae, cellulis elongatis 40 μ . Hyphopodia capitata opposita, 16-20 \times 10, cylindraceo-clavata pedicello brevissimo, capitulo subclavato, integro, saepe fere cylindraceo. Setae myceliales basi geniculatae, 10 μ crassae 350 μ longae, septatae (cellulis 40-46 μ longis), rectae, nigrae, apice subacutatae integrae. Perithecia globosa, astoma 270-320 μ diam., parenchymatice contexta e cellulis polygoniis rubro-brunneis (membrana obscuriore) extus leniter prominulis (perithecium verrucosum reddentibus) 10-14 μ cr. Asci 2-3 spori elongato-clavati vel elliptici. Sporae rectae, late cylindricae 4-septatae, cellulis aequalibus guttulatis, 55-68 \times 24-30, olivaceo-brunneae.

Hab. in foliis coriaceis plantae *Dicotyledoneae*, S. Leopoldo, Brasiliae (J. Rick).

244. *Meliola leptopus* Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 23. — 4586

Irregulariter plus minus totam folii laminam inquinans; opacae nigra. Hyphae mycelii 8-9 μ crassae, rectae, brunneae, oppositae vel alternae ramosae. Hyphopodia capitata opposita pedicellata, recta

cylindraceo-clavata, saepe fere cylindracea, integra, 18-20 \times 10; hyphopodia mucronata ampulliformia, continua, opposita, approximata, recta vel incurva. Setae myceliales ca. 350 \times 8, fuligineo-brunneae, reotae, basi late arcuatae, apice laetiores sensim acutatae. Perithecia ca. 280 μ diam., globulosa, verrucosa (cellulis extus acute prominulis polygoniis), cellulis rubro-brunneis irregulariter polygoniis, 25-48 μ magnis ostiolo demum irregulariter stellato aperta. Asci bispori, ca. 56 \times 34, elliptici. Sporae brunneae, 4-septatae, cylindraceae, guttulatae, constrictae, cellulis aequalibus (vix extimis majoribus), 48-54 \times 16-20.

Hab. amphigena in foliis plantae *Dicotyledoneae* indeterminatae, S. Leopoldo, Brasiliae merid.

245. *Meliola tuberculata* Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 458
 II, 1916, p. 490. — Coloniis amphigenis, saepius epiphyllis, saturate atris, 1-3 mm. diam., circularibus; mycelio sat denso, valde sinuoso; hyphopodiis capitatis alternis, ovatis vel irregulariter lobatis, typice 30 μ circ. distantibus; hyphopodiis mucronatis paucis, anguste conoideis; setis mycelialibus et perithecialibus nullis; perithecorum appendicibus conoideis, 51 \times 27, copiosissimis, quaque fere cellula superficiali in appendicem producta; peritheciis 160 μ diam.; ascis evanidis; sporidiis 4-septatis, 38 \times 14, obtusis, leniter constrictis.

Hab. in foliis *Dicotyledoneae* cujusdam haud determinatae, Vega Baja, Porto Rico. — Species appendicibus perithecialibus, mycelio sinuoso-contorto hyphopodiisque variabilibus eximie distincta.

246. *Meliola aliena* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1535. — 4588
 Plagulas atras velutinas effusas ca. 0,5-1 cm. longas vel confluendo majores efformans; mycelio proprio repente parcissime evoluto, ex hyphis fuscis septatis 6-8 μ cr. composito; hyphopodiis alternantibus, irregularibus, rectis vel curvulis; setis myceliis e contra numerosissimis, validis, rectis vel subrectis, vel etiam irregulariter curvatis, atris, opacis, 200-275 μ longis, 8-14 μ cr., apicem versus tenuatis sed obtusis; peritheciis gregariis, globosis, 130-170 μ diam., atris, globosis, tuberculatis; ascis bisporis, ovatis, fugacibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, non vel vix constrictis, fuscis, 38-45 \times 9-13.

Hab. in ramulis dejectis, Puerto Princessa, Palawan, ins. Philipp. — Setis copiosissimis crassis praecipue distincta.

247. *Meliola conferta* Doidge, Trans. R. Soc. South Afr. V, 1917, p. 724 458
 et 743, t. 59, fig. 13. — Amphigena, maculas atras, subcrustaceas

1.3 mm. diam. efficiens; hyphis fuscis rectis, ramosis, 6-8 μ crassis, ex cellulis 11-18 μ longis compositis; ramis numerosis, oppositis; hyphopodiis capitatis numerosissimis, confertis oppositis, interdum unilateralibus vel alternis, 14-18 μ long.; cellula superiore diverse lobata, plerumque bi-triloba, quoque lobo bi-lobulato, 9-14 μ 11-14; hyphopodiis mucronatis pallidis, 18 μ long.; setis mycelicis nullis; peritheciis (vix maturis) paucis, sparsis, 100-130 μ diam., atris, verrucosis, quibusdam cellulis externis usque 18 μ productis; ascis non visis; sporidiis atro-brunneis, 3-septatis, ad septa vix constrictis, utrinque attenuatis et rotundatis, rectis vel leniter curvatis, 43-50 μ 18-25.

Hab. in foliis arboris ignotæ, prope Durban, Africa austr. (J. MEDLEY).

248. *Meliola curvata* H. S. Yates, The Philipp. Journ. of Sc. Bot. 13., 4590 1918, p. 367. — Epiphylla, maculas atras, minutissimas, 0.5-2 mm. diam., orbiculares efformans vel confluentes; mycelio ex hyphis ramosis brunneis anastomosantibus septatis 7-8 μ crassis composito; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore globulosa, 10-12 μ diam., inferiore 3-5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis; setis ca. 4-5 ad basim peritheci positis, primitus subhyalinis apice spiraliter curvatis dein erectis vel leviter curvatis, ad basim geniculatis, atris, 100-130 μ longis, 10 μ latis, apice acutis, simplicibus; peritheciis globulosis, atris, opacis, tuberculatis, 120-180 μ diam.; ascis ovatis, 4-sporis, 50-60 μ 30; sporidiis cylindræis, utrinque late rotundatis, ad septa vix constrictis, brunneis, 40-45 μ 15-20.

Hab. ad folia matricis ignotæ, Catubig River, Samar, Ins. Philipp. (RAMOS).

249. *Meliola heterodonta* Syd., Ann. Mycol. 14., 1916, p. 357. — Effusa 4591 irregularis, confuens; mycelio ex hyphis longis fuscis 5-7 μ crassis vix septatis (articulis praelongis) undulato-flexuosis hinc inde torulosus composito; hyphopodiis capitatis sat numerosis, alternantibus, semper integris, subcylindræis, totis 12-18 μ longis, cellula apicali 7-9 μ lata, inferiore brevi; hyphopodiis mucronatis etiam numerosis, oppositis, 22-26 μ longis, ad basim 5-6 μ latis. apicem versus tenuioribus; setis tantum circa basim perithecorum evolutis ibique sat numerosis rectiusculis tota longitudine opacis, 350-700 μ longis, ad basim 10-12 μ latis ad apicem mox dentibus 2-6, erectis plus minus longioribus (3-20 μ longis) acutis praeditis, mox in ra-

mos duos fere erectos usque 30 μ longos divisos et ramis his apicem dentis 2-4 breves gerentibus; peritheciis sparsis tuberculatis, 130-160 μ diam., in sicco collapsis; ascis plerumque 2-sporis fugacibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, (cellulis aequalibus), saturate castaneo-brunneis, ad septa constrictis, 30-35 \times 9-12.

Hab. in foliis arboris ignotæ, M. Maquiling, Ins. Philipp. (C. F. BAKER).

250. *Meliola horrida* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 4592
of Sci. VIII (1913) p. 393. — Mycelio amphigeno, plagulas orbiculares, arcte marginatas, subcrustaceas, nigras, hirsutas, 4-5 mm. latas, dispersas formante; hyphis acutangulariter ramosis, rectis, arcte congregatis, ad 8 μ cr., hyphopodiis capitatis plurimis, oppositis, fere adjacentibus, 2 cellularibus, brevissime stipitatis, cellula superiore globoso-ovoidea ad 14 \times 8, hyphopodiis mucronatis rarissimis, alternantibus, ad 18 μ long. obsessis; setis mycelialibus plurimis, erectis, subacutatis, nigro-fuscis, usque ad 400 μ longis, basi 12 μ cr.; peritheciis sparsis, globosis, non verruculosi, astomis, atris, 200 μ diam.; ascis ellipsoideis, bisporis, 50 \times 30; sporidiis oblongis, utrinque rotundatis, subconstrictis, 28 \times 18, flavo-fuscis.

Hab. ad folia coriacea, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — Setis densis, fuscis, longis et forma dispositioneque hyphopodiorum distincta.

251. *Meliola megalopoda* Syd., Ann. Mycol. 15., 1917, p. 189. — Amphigena, 4593
plagulas orbiculares aterrimas 3-6 mm. latas velutinas facile secedentes formans; mycelium matrici dense adpressum, copiose digitato-ramosum, ex hyphis dilute brunneis 10-12 μ latis copiose septatis formatum; hyphopodia capitata copiosa, alternantia, 30-38 μ longa, cellula superiore 18-24 μ lata semper et saepe profunde lobata, cellula inferiore angusto-cylindracea vel cuneata; hyphopodia mucronata rara, subito in collum angustum longum producta, usque 28 μ longa, setae myceliales copiosissimae, semper plus minus falcato-curvatae, 600-900 μ longae, basi 10-12 μ latae, apicem versus mox non vel vix attenuatae, mox magis attenuatae, sive tota longitudine opacae, atrae, sive ad apicem pellucide brunneae, simplices; perithecia globosa, inter setas abscondita, 280-350 μ diam., glabra, levia, in sicco cupuliformiter collapsa; asci facile diffuentes; sporae maximae oblongae, 4-septatae, valde constrictae, obscure castaneo-brunneae, utrinque late rotundatae 62-70 \times 22-30.

Hab. in foliis coriaceis arboris ignotae humi jacentibus in silva, Mt. Maquiling, Ins. Philipp. (C. P. BAKER).

252. *Meliola natalensis* Doidge, Trans. R. Soc. South Afr. V, 1917, 4584 p. 724 et 743, t. 59, fig. 12. — Amphigena, plerumque epiphylla, maculas atras carbonaceas, rotundatas, 2-3 mm. diam. efficiens; mycelio radiante ramoso; hyphis fuscis, subsinuosis et saepe ad septa constrictis, 6-8 μ crassis, e cellulis 14-18 μ long. compositis; ramis oppositis; hyphopodiis capitatis alternis v. unilateralibus, stipitatis, 18-21 μ long., cellula basali brevi, prope hyphas angustiore; capitulo latiore quam longo 2-3 lobato, quoque lobo-bi-lobulato, 12-14 \times 16-20; hyphopodiis mucronatis raris, sparsis; tenuibus, rectis v. recurvatis, ca. 16-18 \times 4-5, setis myceliis nullis; peritheciis aggregatis, atris globosis, carbonaceis 130-150 μ diam., rugulosis, appendiculis numerosis, subcylindraceis, larviformibus, 40-45 \times 18, apice interdum recurvatis; ascis bisporis; sporidiis 3-septatis, rectis v. leniter curvatis, ad septa valde constrictis 40-44 \times 14-16.

Hab. in foliis arboris ignotae, Ungeni prope Durban, Natal, Africa austr. (E. M. DOIDGE).

253. *Meliola samarensis* H. S. Yates, Philipp. Journ. Sc. Manila, XII 4595 (1917) p. 368. — Plagulas atras, velutinas, confluentes et superficiem petiolorum obturgentia efformans; mycelio denso, ex hyphis obscure brunneis septatis, 7-8 μ latis composito, ramis irregularibus; hyphopodiis capitatis paucis, alternantibus vel irregularibus, cellula superiore globosa, 15 μ diam., vel elongata et 10-15 \times 15-20; cellula inferiore 4-5 μ longa; hyphopodiis mucronatis paucis; setis myceliis numerosissimis, validis, 300 μ longis, 16 μ latis, erectis, leviter curvatis, opacis, atris, apice simplicibus, acutis; peritheciis numerosis, 150-250 μ diam., atris, opacis, tuberculatis, costulatis; ascis evanescentibus, 60-70 \times 35-40, 2-4-sporis; sporidiis 4-septatis, brunneis, oblongis, ad septa leviter constrictis, utrinque late rotundatis, 45-48 \times 18-20.

Hab. in foliis petiolis plantae indet., Catubing River, Samar Ins. Philipp. (RAMOS). — Videtur affinis *M. alienae*.

- IRENE Syd. et Theiss., Ann. Mycol. 15., 1917, p. 194. — Characteres *Meliolae* sed setae nullae. — Typ. gen. *Meliola inermis* Kalch. et Oke.
1. *Irene papillifera* Syd., l. c. p. 194. — Epiphylla, plagulas minutas 4596 orbiculares 1-2 mm. diam. discretas formans; mycelium ex hyphis irregularibus saepe torulosis vel flexuosis septatis, obscure castaneo-

brunneis 9-11 μ latis parum ramosis compositum; hyphopodia capitata modice numerosa, valde irregularia, plerumque piriformia, sed saepe lobata aut angulata, cellula superiore maxima inferiore brevi stipitiformi, obscure brunnea, tota 25-32 μ longa, superne usque 20 μ lata, basi 7-9 μ lata, alternantia; hyphopodia mucronata haud numerosa alternantia vel opposita 22-26 μ longa; setae nullae; perithecia in centro plagularum paucis conferta, aterrima, 150-200 μ diam., spurie ostiolata, contextu ex cellulis magnis sed variae dimensionis 14-22 μ diam. composito, ubique papillis conicis usque 35 μ longis ad basim 24-28 μ latis obscure brunneis summo apice aterrimis obsita; asci ovoidei, 2-spори; sporae ellipsoideo-cylindræae, 4-septatae, rectae, ad septa leniter constrictae, brunneae, utrinque rotundatae, 42-50 \times 18-21.

Hab. in foliis *Saurauiae elegantis* (Dilleniaceae), Ifugao et Bontoc, Luzon, Ins. Philipp. (H. S. YATES).

2. *Irene anisomera* Syd., l. c. p. 194. — Hypophylla, plagulas aterrimas 2-10 mm. latas (v. ultra?) formans; mycelium ex hyphis densissime intertextis valde ramosis septatis (articulis 15-20 μ longis) obscure brunneis 6,5-8,5 μ crassis compositum; hyphopodia capitata copiosa, alternantia 16-23 μ longa, integra, recta vel recurvata, cellula superiore 10-13 μ lata, inferiore angustiore et minore; hyphopodia mucronata non visa; setae nullae; perithecia irregulariter distributa, sparsa vel aggregata, globosa, atra, 150-180 μ diam. asci bispori, elliptici; sporae oblongae vel cylindræae, rectae vel inaequilatae, utrinque rotundatae, 3-septatae, constrictae, obscure castaneo-brunneae subopacae, 48-52 \times 15-19, cellulis extimis multo minoribus (ca. 9 μ), mediis duplo longioribus (ca. 17-18 μ) et amplioribus.

Hab. in foliis *Podocarpi costati* (Coniferae), Mt. Banahao, Laguna, Luzon (H. S. YATES).

3. *Irene Nephelii* Sacc., Notae Mycol. XXIV (Bull. Orto bot. Napoli, 1918) sub *Meliola*, p. 4. — Coloniis minutis, epiphyllis, sparsis, 2 mm. diam., raro confluentibus, nigricantibus tenuiter velutinis; subiculi hyphis e peritheciis singulis exquisite radiantibus 270-325 \times 8-9, repetite patenti ramosis, brunneis; hyphopodiis brevibus, bilateralibus, copiosis, ovoidis, obtusis, bicellularibus, 8-10 \times 6, nonnullis apice acutatis; peritheciis globulosis, 145 μ diam., vix colliculosis, nigricantibus; ascis jam resorptis; sporidiis tereti-oblongis utrinque rotundatis, 30 \times 12, constrictulo-4-septatis, fuliginis.

Hab. in foliis *Nephelii cappacei* (Sapindaceae), in Horto bot. Singapore (BAKER). — Setulae nullae visae, hinc ad novum

genus *Irenem* spectat potius quam ad *Meliolam*.

MELIOLINA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 553 (Etym. a *Meliola* cui proxime affinis). — Characteres *Meliolae*, sed defectu hyphopodiorum diversum.

1. *Meliolina radians* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 553. — 4599

Hypophylla, plagulas 1-2 cm. latas valde velutinas atras aspectu radiantes v. dendriticas formans; mycelio ex hyphis dilute brunneis remote septatis parce sed irregulariter ramosis saepe torulosis v. varie curvatis formato; setis mycelicis numerosissimis, erectis, superne valde dendritico-ramosis, inferne 7-9 μ cr. et opacis, ad apicem in ramos 2-3 primarios divisus; ramis his in ramos secundarios iterum ramulos plus minus longos (subinde usque 80 μ longos) gerentes divisus; apicibus ramulorum dilute et pellucide brunneis; peritheciis solitariis, omnino inter setas absconditis, globosis, 175-250 μ diam.; ascis plerumque bisporis; sporidiis 3-septatis, constrictis, obscure castaneo-brunneis, 42-54 μ long., cellulis duabus extimis ca. 10 μ longis, duabus mediis majoribus ca. 15-20 μ longis.

Hab. in foliis *Eugeniae xanthophyllae* (Myrtaceae) Montalban pr. Rizal, Luzon, Ins. Philippin. (M. RAMOS). — Secundum Auctores hoc genere pertinent *Meliola cladotricha* Lev., *M. pulcherrima* Syd. (in *Eugenia Jambolana* nec in *Ficus benjamin* ut in Fungi exot. exs. n. 124), *M. arborescens* Sydow.

2. *Meliolina Yatesii* Syd., Ann. Mycol., 15. 1917, p. 195. — 4600

plagulas 0,5-2 cm. latas saepe confluentes tunc irregulares et majores velutinas crassas atras formans; mycelium ex hyphis longis non vel parce ramosis saepe lateraliter connexis pellucide brunneis remote septatis 7-9 μ crassis hyphopodiis destitutis compositum; setae mycelicae copiosissimae, erectae, rigidae, 250-320 μ longae, basi 8-10 μ crassae, opacae eadem ramificatione ut in *Meliolina arborescente* et *Mel. pulcherrima*; perithecia sat numerosa inter setas abscondita, globosa, 200-250 μ diam., astoma, aterrima, asci crasse clavati vel saccati, 110-150 \times 35-40, octospori; sporae oblongatae, utrinque rotundatae, 3-septatae, ad septa plerumque fortiter constrictae, brunneae, 55-65 \times 18-20, loculis valde inaequalibus, duobus extimis 11-14 μ longis et 10-12 μ latis, duobus mediis 18-22 μ , longis et 17-20 μ latis.

Hab. in foliis *Viburni* (?) sp. (Caprifoliaceae), Mt. Banabao, prov. Laguna, Ins. Philipp. (H. S. YATES).

3. *Meliolina malacensis* Sacc., Notae Mycol. XXIV (Bull. R. Orto bot. 4601

Nap. 1918) p. 5, sub *Meliola*. — Coloniis hypophyllis, modo minutis 2-3 mm. diam., modo confluyendo usque ad 1-2 cm. lat., ambitu irregularibus, nigricantibus, velutinis; subiculi hyphis repeatibus parvis laxè anastomosantibus, ergo obsolete reticulatis, septulatis, brunneis, sine hyphopodiis, setulis copiosis mycelialibus et perithecialibus, simplicibus, septatis, acutis, 300-350 \times 5-5,5, rectis; peritheciis globulosis, astomis, deorsum setulosis, 250-300 μ diam., contextu minute parenchymatico atro-fuligineo; ascis oblongo-clavatis, apice rotundatis, deorsum tenuato substipitatis, 80-90 \times 25-30, paraphysibus bacillaribus, facile diffluentibus obvallatis, 4-8-sporis; sporidiis distichis ovato-oblongis, 3-septatis, ad septum medium leviter constrictis, 35-45 \times 12-15, fuligineis.

Hab. in foliis adhuc subviviis *Wormiae suffruticosae* (Dilleniaceae), in Horto bot. Singapore (BAKER). — Hyphopodiis deficientibus ad novum genus *Meliolinam* spectat.

4. *Meliolina arborescens* Sydow, Ann. Myc. XII, 1914, p. 553, *Meliola* 4602
arborescens Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1923. — Plagulas atras circulares vel irregulares hypophyllas, 0,5-1,25 cm. longas, aterrimas, velutinas efformans; mycelio ex hyphis longis, non vel parce ramosis, pluribus lateraliter connexis, brunneis sed pellucidis, remote septatis (articulis 20-40 μ longis) 7-8 μ crassis, hyphopodiis destitutis composito; setis mycelicis numerosissimis, erectis, rigidis, 300-420 \times 8-10, opacis, in parte superiore in 2-3 ramos primarios subrectos vel saepius repandos aut recurvatos divisus, ramis his in ramos secundarios iterum divisus; ramis secundariis sese divisus et ramulos ultimos erectos vel repandos, longiusculos, 35-70 \times 3,5-6, apice leniter attenuatos vel obtusos, pellucide brunneolos usque subhyalinos gerentibus; peritheciis raris, intra setis absconditis, magnis, 300-450 μ diam., globosis, aterrimis, contextu opaco; ascis ovato-ellipsoideis, 1-2-sporis, fugacibus; sporidiis oblongis, utrinque rotundatis, 3-septatis, ad septa valde constrictis, obscure castaneo-brunneis, 42-60 \times 16-22, loculis duobus extimis multo minoribus globulosis v. hemisphaericis 10-12 μ altis, duobus centralibus majoribus 17-22 μ longis et latis.

Hab. in foliis vetustis *Eugeniae globosae* (Myrtaceae), Todaya, Mt. Apo, Mindanao, ins. Philipp. (A. D. E. ELMER). — Species perdistincta, pulchra, facile dignoscenda.

5. *Meliolina pulcherrima* (H. et P. Sydow) H. et P. Sydow, Ann. Myc. XII, 4603
 1914, p. 553, *Meliola p.* H. et P. Sydow, Ann. Mycol. XI, 1913, p. 254, fig. I. — Hypophylla, aterrima, crassa, densissima, velutina, primitus

maculas orbiculares 3-10 mm. diam. dein conflundo irregulares et majores efformans, fere omnino ex setis mycelicis densissime stipatis constans; mycelio parco, rudimentari, ex hyphis fusco-brunneis 7-9 μ crassis ramosis remote septatis longitudinaliter conjunctis v. anastomosantibus composito, hyphopodiis nullis; setis mycelicis innumeris, erectis, rigidis, 350-425 μ long. basi 7-9 μ cr., remote septatis, atris, opacis, superne bi-trifidis et dilutioribus, quoque ramo ramulos 2 vel 3 plerumque longissimos emittente, ramis ramulisque plus minus late patentibus et saepe etiam recurvatis, apicibus ramulorum dilute coloratis saepe subhyalinis, obtusis saepeque etiam leniter dilatatis; peritheciis paucis inter setas absconditis, vix visibilibus, globosis, atris, 175-350 μ diam., contextu opaco, basi hyphis plerumque simplicibus usque 130 μ long. cinctis; ascis ovato-oblongis usque crasse clavatis, 55-100 \times 30-40, 6-sporis, sporidiis tristichis, oblongis, triseptatis, non vel vix constrictis, utrinque late rotundatis, brunneis, 48-58 \times 12-16.

Hab. in foliis vivis *Eugeniae Jambolanae* (Myrtaceae), Antipolo prov. Rizal, Luzon, ins. Philipp. (M. RAMOS).

6. *Meliolina naplochaeta* Syd., Ann. Mycol. 15., 1917, p. 145. — Hypo- 4604
phylla, plagulas minutas discretas rotundatas, 1-2 mm. diam. velutinas aterrimas formans; mycelio ex hyphis breviusculis fusciculis flexuosis simplicibus v. parce ramosis, 4-5 μ cr. remote septatis hand hyphopodiatis composito; peritheciis paucis in quaque plagula, 150-180 μ diam.; setis circa perithecia dense stipatis, copiosis, simplicibus, erectis, 200-300 \times 5-7, obscure brunneis, ad apicem plerumque rotundatis, rarius leniter tenuatis; ascis oblongis v. oblongo-ovoideis, breviter pedicellatis, 6-8-sporis, 80-130 \times 35-45; sporidiis 2-3-stichis, oblongis, 3-septatis, non v. leniter constrictis, fuscis, 40-55 \times 16-20, utrinque ut plurimum tenuatis, apicibus obtusis, loculis extimis multo minoribus, subinde minutissimis.

Hab. in foliis *Metrosideri polymorphae* (Myrtaceae), Nuanu Pali, Oahu, ins. Sandwicensium (H. L. LYON).

MELIOLINOPSIS Beeli, Bull. Jard. Bot. État Bruxelles v. 7., 1920, 4605
p. 101, 102 (Etym. a *Meliola* et *opsis* quia proximum).—Asci persistentes, cylindracei, plerumque 8-spori, plerumque paraphysati.

Huc ducendae sunt secund. BEELI: *Meliola Quercinopsis* var. *megalospora* Rehm, *M. hyalospora* Lév., *manaosensis* Henn., *iquitosensis* Henn., *Uvariae* Rehm, ? *clavatispora* Speg., *Yatesii* Syd., *callosperma* Speg., *quercina* Pat., *anomala* Tracy et Earle, *curviseta* Rac., *cla-*

vispora Pat., *haplochaeta* Syd., *Theobromae* Fc. v. Faber, *Tetradeniae* Berk., *octospora* Cke.

EUANTENNARIA Spegaz., Fungi Costaric. nonn., Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 187. — Subiculum ex hyphis to-
rulosus pro parte repentibus pro parte erectis intricatisque com-
positum, hyphopodiis destitutum; perithecia inter hyphas nidulantia
globosa astoma membranaceo-coriacella parenchymatica atra glabra
v. basi hyphis paucis radiantibus ornata; asci 2-8-spori; sporae
majusculæ fusideo-cylindræae 2-5 septatae fuligineae. A *Meliola*,
cui peraffinis, recedit subiculi fabrica nec non hyphopodiorum de-
ficientia.

1. *Euantennaria tropicicola* Spegaz., l. c. cum icon. — Late effusa ater- 4606
rina, primo tenuis araneosa dein plus minusve crassa subpannosa,
hyphis erectis 0,5-2,5 mm. alt. subsimplicibus, dense articulatis,
articulis subglobosis 10-15 \times 12-14; peritheciis majusculis 250-300 μ
diam. glabris; ascis saepius tetrasporis, 60-65 \times 30; sporidiis subfu-
soideis 5-septatis non v. vix constrictis fuligineis sed pellucidis
laevibus, 35-40 \times 10-13.

Hab. in foliis vivis *Miconia*e ejusdam, in silva La Palma
Costarica, America trop. (Prof. H. PITTIER).

Sect. 6. — *Scolecosporae*

OPHIOMELIOLA Starb. — Syll. XVI p. 416, XXII p. 57. — Secundum
Theissen et Sydow, Ann. Mycol. XV, 1917, p. 467, typus huius ge-
neris, sive *Ophiom. Lindmani* Starb., ad Pseudosphaeriaceas adscri-
benda.

1. *Ophiomeliola Bomplandi* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4607
Buenos Aires XXIII p. 46 (1912). — Maculis nullis; peritheciis
hypophyllis, sparsis, minutis, sublenticularibus, 150 μ diam., asto-
mis, nigris, membranaceis, setis tenuibus, patentiusculis, simplici-
bus, rectis vel vix flexuosis, 100-300 \times 3-4, olivaceis, apice subhya-
linis, 2-4-septatis conspersis, excipulo parenchymatico-sinuoso, majus-
culo, olivaceo-opaco; subiculo parvissimo ex hyphis tortuosis 3-4 μ
cr. cinctis; ascis cylindræis, apice rotundatis, basi breviter cu-
neato-pedicellatis, 70-90 \times 10-12, paraphysibus parvis filiformibus
vix longioribus cinctis, octosporis; sporidiis filiformibus, utrinque
obtusiusculis, 60-70 \times 3, septis 3-5 praeditis, ad septa non con-
strictis, olivaceis.

Hab. in foliis vivis *Colleae* sp. (? Compositae, ? Leguminosae), in pratis prope Bompland, Misiones: Argentina (P. JÖRGENSEN).

RIZALIA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 546. (Etym. a loco natali). — Perithecia superficialia, irregulariter globosa v. ovata, diu clausa, tandem vertice irregulariter aperta, mycelio parco ex hyphis fuscis composito et setas erectas v. suberectas gerente haud hyphopodiato insidentia, minuta, extus (praecipue superne) setis paucis irregulariter obsita, pariete crasso grumoso haud parenchymatico. Asci clavati, aparaphysati, sessiles, octospori. Sporidia elongato-filiformia, hyalina, 1-septata.

1. **Rizalia fasciculata** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 546, 4608 fig. 1. — Peritheciis sparsis v. laxè aggregatis, superficialibus, irregulariter globosis, usque irregulariter ovatis, 65-105 μ altis 45-70 μ latis, basi hyphis mycelicis cinctis v. potius suffultis, extus (praecipue parte superiore) setis paucis obtusis, primo clausis, tandem vertice subostiolatim apertis, pariete crasso (6-8 μ), fuscis, contextu grumoso-coriaceo (haud celluloso) tenaci; mycelio parce evoluto ex hyphis brevibus fuscis constante, setas erectas obtusas fuscas 3-5-septatas, 50-90 \times 4-6 gerente; ascis fasciculatis, clavatis, rotundatis, numerosis (20-30) in quoque perithecio, sessilibus, aparaphysatis, 26-32 \times 9-11, octosporis; sporidiis parallele fasciculatis, elongatis, plerumque plus minus inaequilateris, subinde fere falcatis, utrinque parum attenuatis, hyalinis, medio 1-septatis, primo minute guttulatis, ascorum fere longitudine, 25-29 \times 1,5-2.

Hab. parasitica in *Microthyriaceae* quadam indet., ad folia *Diospyri* sp. (Ebenaceae), pr. Rizal, Ins. Philippin. (M. RAMOS).

TRICHOSPERMELLA Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 38 (1912). — (Etym. *thrix*, *thricos* et *sperma*, ob sporidia filiformia). — Perithecia superficialia, ostiolata, glabra, subiculo parco donata. Asci cylindranei, aparaphysati, octospori. Sporidia filiformia hyalina.

1. **Trichospermella pulchella** Speg., loc. cit., cum ic. — Peritheciis sparsis, hypophyllis, ex tomento erumpentibus, aterritis, globosis, 250-300 μ diam., valide umbonato-vel subcylindraneo-ostiolatis, subiculo parcissimo ex hyphis gracilibus, 2-4 μ cr., dense irregulariterque ramulosis, hyalinis vel chlorinis efformato adnatis; ascis clavato-fusoideis, apice late obtuseque rotundatis deorsum sensim attenuatis, breviter pedicellatis, 100 \times 8; sporidiis filiformibus, utrinque rotun-

dati, multiguttulatis, hyalinis, 75-80 \approx 1-1,5.

Hab. in foliis vivis *Cestri pubescentis* (Solanaceae), in nemoribus prope Santa Ana, Misiones: Argentina.

PERISPORIEAE DUBIAE V. INCERTAE SEDIS

LANOMYCES Ern. Gäumann, Ann. Jard. Bot. de Buitenzorg, v. XXXII, 1.^o P., p. 46. — Mycelio intramatrici v. superficiali, lanato, brunneo; peritheciis globosis, astomis, flavis parenchymaticis; ascis singulis in peritheciis nascentibus, magnis, multisporis; sporidiis hyalinis unicellularibus. — Sec. Auct. « hoc genus inter Perisporiaceas maxime segregatum, nam adhuc sola species est quae hyphis asco-genis caret, ubique perithecia ascum solum, magnum multisporum in se continent. Forte quaedam analogia inter Erysiphaceas et Perisporiaceas esse potest... ».

1. *Lanomyces tijbodensis* E. Gäumann, l. c. — Amphigena; mycelio arachnoideo dein lanuginoso, persistenti, primum flavo, demum vetustate fulvo v. atro; peritheciis minutissimis, singulis v. gregariis in mycelio superficiali insidentibus, plus minusve sphaeroideis, peridio tenui praeditis, flavis monascis, 110-230 μ diam.; appendicibus creberrimis longissimis filiformibus, simplicibus v. ramosis, sursum flexis; sporidiis copiosis ovato-cylindraceis, hyalinis, multinucleatis, 15-28 \approx 10-16, levibus.

Hab. in foliis *Castaneae argenteae* Bl. (Fagaceae), in silva primaeva prope Tjibodas, Java.

RHIZOGENE Sydow, Ann. Mycol. 18., 1920, p. 181. — Stromata orbiculariter dense aggregata, superficialia, atra, hypostromate communi subcuticulari, hyphis liberis parallelis verticalibus suffulta; loculi ad marginem stromatis evoluti, omnino immersi; asci sporaeque adhuc tantum immaturi visi.

1. *Rhizogene Symphoricarpi* (Sydow) Sydow, l. c., *Lasiobotrys Symphoricarpi* Sydow, Ann. Mycol. 16., 1918, p. 244. — Amphigena; sclerotia in greges orbiculares 1-1,5 mm. diam. laxè disposita, sese non vel vix attingentia, orbicularia vel orbiculari-turbinata 240-350 μ diam., usque 150 μ alta, circumcirca crusta atra praedita, intus viridulo-albida, e cellulis 8-10 \approx 6-8 metientibus contexta, subtus hyphis flexuosis 2-3 μ crassis subhyalinis fulta, hypostromate denso atro-brunneo; perithecia sporaeque non visa.

Hab. in foliis vivis *Symphoricarpi* spec. (Caprifoliaceae), San Juan Mts., Colorado, America bor.

Subfam. 5. Capnodieae SACC.

Dispositio secundum Cl. SPEGAZZINI in l. c.

1. Perithecia	{ expansa-corniformia simplicia v. ramosa, sporidia muralia colorata subglobosa	CAPNODIUM Mntgn. 2.
2. Ostiolum	{ attenuatum plano v. vix umbonato	3. 6.
3. Sporidia	{ elongata filiformia, v. fere pluri- septata olivacea. brevia, plus minus ellipsoidea	OPHIOCAPNODIUM Speg. n. gen. 4.
4. Sporidia	{ 1-locularia, colorata 2-locularia, chlorina	CAPNODIOPSIS Hug. 5.
5. Os ostioli	{ nudatum nec conidiferum conidiis praeditum	RHYNCHOMELIOLA Speg. HENNINGSONMYCES Sacc.
6. Perithecia	{ pubescentia, pilosa v. hispida omnino glabra	7. 11.
7. Sporidia	{ 2-locularia multilocularia	8. 9.
8. Sporidia	{ hyalina olivacea	PERISPORIOPSIS Hng. ACANTHOSTOMA Thsz.
9. Sporidia	{ elongata, subfiliformia, chlorina brevia, non filiformia	OPHIOMELIOLA Strb. 10.
10. Sporidia	{ transverse tantum septata transverse et longitud. septata pedicello elongato simplici v.	HYPOCAPNODIUM Speg. n. gen. CAPNOPHAEMUM Speg. n. gen.
11. Perithecia	{ ramoso sessilia v. subsessilia	12. 14.
12. Sporidia	{ 1-locularia, subglobosa multilocularia	CAPNODIELLA Sacc. 13.
13. Sporidia	{ transverse tantum septata, hyalina transverse et long. sept., olivacea	CAPNODINA Sacc. PARACAPNODIUM Speg.
14. Sporidia	{ elongata filiformia brevia nec filiformia	PSUDOMELIOLA Speg. 15.
15. Sporidia	{ continua, hyalina (= Guignar- diella Sacc. et Syd.) 1-pluriseptata	PILGERIELLA Hng. 16.
16. Sporidia	{ transverse tantum septata transverse et longit. septata septum unicum medium, sporid.	17. 21.
17. Septa	{ hyalina septa plurima	CAPNODINULA Speg. n. gen. 18.
18. Sporidia	{ hyalina colorata	19. 20.

- | | | |
|----------------|----------------------|-----------------------------|
| 19. Perithecia | { setulis circumdata | MICROTYLE Speg. n. gen. |
| | { omnino nuda | LIMACINIA Neg. |
| 20. Asci | { 8-spори | METACAPNODIUM Speg. n. gen. |
| | { 16-spори | CAPNODARIA Sacc. |
| 21. Sporidia | { hyalodictya | ZUKALIOPSIS Hng. |
| | { phaeodictya | LIMACINULA Sacc. |

Dispositio sec. THEISSEN et SYDOW, Ann. Mycol. 15., 1917, p. 471 (nec THEISSEN, in Verh. zool.-bot. Ges. Wien. 66., 1916, p. 363).

A. Perithecia pedunculata v. varie verticilliter conformata, parietibus plerumque ex hyphis meridianis constitutis (EUCAPNODIEAE Th. et Syd.)

I. Sporidia transverse tantum septata, 4-plurilocularia.

1. Sporidia hyalina

a) Mycelio perisporioideo, crasso, spugnoso hyphis gelatinosis contexto

1. SCORIAS Fr.

b) Mycelio dematiaceo, membranaceo

2. ANTENELLA Th. et Syd.

2. Sporidia brunnea, asci saepe poly-spори

3. CAPNODARIA Th. et Syd.

II. Sporidia muriformia

1. Hyalina

4. PARACAPNODIUM Speg.

2. Brunnea

5. CAPNODIUM Mont.

B. Perithecia insidentia (raro hyphis basilaribus stipitata), globosa, dematiacea (CHAETOTHYRIAE Theiss.)

I. Mycelium et perithecia superficialia libera

a) Setulae praesentes

1. Sporidia hyalodidyma

α) Perithecia levia, tenui membranacea, pallida; mycelio setulis longis tortuosis praedito.

6. DIMEROSPORINA v. Höh.

β) Perithecia molli-coriacea, obscura; perithecia et mycelium breviter setulosa

7. CHAETOTHYRINA Theiss.

γ) Perithecia tenui-membranacea, obscura, typice apice tantum monosetulosa; mycelio setuloso

8. CERATOCHEATE Syd.

2. *Sporidia phaeodidyma*
 α) *Mycelium exyphopodiatum*
 (1) *Perithecia monasca*
 (2) *Perithecia polyasca*
 β) *Mycelium exyphopodiatum*
3. *Sporidia hyalophragmia*
 α) *Setulae peristomales tantum praesentes*
 β) *Setulae peritheciales v. mycelicae praesentes*
4. *Sporidia phaeophragmia*
 5. *Sporidia hyalodictya*
 6. *Sporidia filiformia*
- b) *Setulae nullae*
 1. *Sporidia hyalodidyma*
 2. *Sporidia phaeodidyma*
 α) *Perithecia monasca*
 β) *Perithecia polyasca*
3. *Sporidia hyalophragmia*
 4. *Sporidia phaeophragmia*
 5. *Sporidia e hyalina pallide phaeodictya*
6. *Sporidia atro-phaeodictya*
- II. *Mycelium v. perithecia immersa*
 a) *Mycelium subenticulare, perithecia libera, sporidia phaeodidyma*
 b) *Mycelium liberum, perithecia pede centrali infixa; sporidia hyalodidyma*
9. *BALLADYNA* Rac.
 10. *BALLADYNOPSIS* Theiss. et Syd. n. gen.
 11. *NEOHONELIA* Theiss. et Syd. n. gen.
12. *AITHALODERMA* Syd.
 13. *CHAETOTHYRIUM* Speg.
 (= *Zuckalia* Sacc., *Chaetasterina* Bub.)
14. *SETELLA* Syd.
 15. *TREUBIOMYCES* v. H.
 16. *ACTINOCYMBE* P. Henn.
17. *CALYPTRA* Th. et Syd. n. gen.
 18. *BALLADYNELLA* Th. et Syd. n. gen.
 19. *HENNINGSOMYCES* Sacc.
 (= *Dysrhynchis* Clem. 1909)
20. *LIMACINIA* Neg.
 21. *PHRAGMOCAPNIAS* Th. et Syd. n. gen.
 22. *PHAEOSACCARDINULA* P. Henn.
 (= *Tephrosticta* Syd. = *Capnites* Th. = *Limacinula* Sacc. = *Phaeopeltis* Clem.)
23. *COCCODINIUM* Mass. (*Naetrocymbe* Körh.)
24. *KUSANOBOTRYS* P. Henn.
 25. *ADELOPUS* Th. n. nov.
 (= *Cryptopus* Theiss., nec Lindl., Orchid.)

GENERA DUBIA :

Sporidia phaeodidyma: asci 8-spore (*Lizonia* De Not.); asci 16-spore (*Pseudolizonia* Pir.).

Sporidia phaeophragmia (*Asteridiella* Mc Alp.).

GENERA REMOVENDA .

Antennularia Rehl. (= *Antennaria* Lk.).

Apiosporium Kze.

Capnodiella Sacc. 1905 = *Sorica* Giesenh. 1904 (Syll. XVII p. 621).

Lizoniella (P. Henn.) Sacc. = *Sphaeriaceae*.

Capnodiopsis P. Henn. = *Agyriaceae*.

Seurattia Pat. = *Atichia* Flot. (Syll. XXII p 769): *Saccharomycetaceae*.

Perisporiopsis P. Henn. = *Pseudosphaeriaceae*.

Zukaliopsis P. Henn. = *Myriangaeae*.

Sect. 1. *Hyalodidymae*

DIMEROSPORINA v. Höhnelt, *Fragm. z. Mykol.* n. 610, 1909; Theissen et Sydow, *Ann. Myc.* 15., 1917, p. 474. — Syn. *Dimerosporiella* v. Höhn. nec Spegazzini, Syll. XXII p. 29.

1. **Dimerosporina** *Dinochloae* Syd., Philipp. Journ. of Sci., v. 9., Sect. 4612 C., n. 2, 1914, p. 161. — Epiphylla, maculas minutas parum perspicuas rotundatas 2-4 mm. latas tandem confluentes atro-griseas formans; subiculo superficiali, parce evoluto, ex hyphis brevibus cellulosus (cellulis ca. 8-12 μ long. v. latis) conidia helminthosporioides obclavata 4-6 septata non constricta flavidulo-fuscidula 55-75 μ longa 11-14 μ lata, crasse tunicata (membrana 2-3 μ crassa) generantibus composito, fusco, ubique setis numerosis erectis rectis vel vix flexuosis apice semper obtusis atro-olivaceis 100-220 μ longis 9-11 μ latis septatis (articulis 15-25 μ longis) obsito; pycnidiis numerosis, primitus globulosis, dein obovatis, stipitatis, spermatia minutissima hyalina 2 μ longa 1 μ lata includentibus; peritheciis eadem forma et magnitudine ac pycnidiis, pedicello brevi crasso 5-20 μ longo 5-10 μ lato suffultis, primitus globoso-clausis, dein obovatis, et imperfecte ostiolatis, 40-50 μ diam., contextu tenaci olivaceo-fuligineo ex cellulis 6-8 μ diam. composito; ascis sporidiisque nondum maturis.

Hab. in foliis *Dinochloae* scandentis (Graminaceae), Palawan, Mount Capoas, Taytay, Ins. Philipp. (MERRILL).

2. **Dimerosporina** *pusilla* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 269. — Epiphylla, sparsa, maculas minutissimas oblongas, $\frac{1}{3}$ -1 \times 0,1-0,2 mm., atras formans; subiculo superficiali, tenui, membranaceo, parce evoluto, celluloso, ubique setis numerosis erectis, rigidis, opacis, obscure fuscis, ad apicem obtusis leniterque dilatatis, 2-3-septatis, 40-55 \times 5-8 obsito; peritheciis numerosis, globulosis vel globoso-obpiriformibus, 35-60 μ altis, 25-50 μ latis, basi late rotundatis et hypha brevissima suffultis, superne etiam rotundatis et primo clausis, tandem imperfecte ostiolatis, contextu tenaci olivaceo-fuligineo ex cellulis po-

lygonalibus 5-8 μ latis composito; ascis pluribus, 4-8, in quoque perithecio, ovatis, antice crasse tunicatis, aparaphysatis, 20-28 \times 16-20, octosporis; sporidiis conglobatis, oblongis, utrinque rotundatis, medio vel circa medium 1-septatis, non vel vix constrictis, hyalinis, 15-18 \times 3,5-4,5.

Hab. in foliis vivis *Lophatheri gracilis* (Graminaceae), Polillo, Mt. Malulud, ins. Philipp.

CHAETOTHYRINA Theissen, Ann. Mycol. 11., 1913, p. 495, 496.— Mycelium dematiaceum. Perithecia insidentia, globosa, polyasca. Setulae peritheciales v. mycelicae praesentes. Sporidia hyalodidyma.— Typus *Chaetothyrina Musarum* (Speg. ut *Chaetothyrium*) Theiss. 4614

CERATOCHAETE Syd., Ann. Mycol. 15., 1917, p. 179.— Mycelium superficiale, ex hyphis brevibus dense ramosis et anastomosantibus crustaceae conjunctis compositum, circa perithecia setigerum. Perithecia globosa, astoma, contextu fusco parenchymatico unistratoso, ad apicem setula 1 vel rarius 2-3 longis rigidis praedita. Asci octospori, aparaphysati. Sporae hyalodidymae, oblongo-ellipsoideae vel ovatae.

1. **Ceratochaete philippinensis** Syd., Ann. Mycol. 15., 1917, p. 179.— Amphigena, plagulas tenues laxas interruptas irregulares formans; mycelium crustaceum, ex hyphis brevibus densissime ramosis anastomosantibusque pelliculae ad instar conjunctis fuscidulis 6-7 μ crassis compositum, haud hyphopodiatum, hinc inde, praecipue circa perithecia setulas simplices erectas rigidas usque 450 μ longas fuscidulas obtusas ad apicem saepe dilutiores usque subhyalinas 6,5-8 μ crassas remote septatas crasse tunicatas gerens; perithecia gregaria, sessilia, globosa, 60-100 μ diam., astoma, ad verticem plerumque setula singula (rarius setulis 2-3) erecta rigida fusca obtusa septata 50-200 μ longa 6,5-8 μ crassa gerentia, contextu fusco unistratoso parenchymatice e cellulis 9-11 μ diam. composito, ca. 5-10 ascos includentia; asci brevissime pedicellati vel fere sessiles, ovato-oblongi usque oblongi, 45-50 \times 18-24, octospori, ad apicem incrassati et rotundati, aparaphysati; sporae 2-3-stichae, oblongo-ovatae vel ovato-ellipsoideae, utrinque rotundatae vel ad basim subinde leniter attenuatae, medio septatae, non constrictae, hyalinae, 18-22 \times 7-9. 4615

Hab. in foliis submortuis graminis cujusdam, pr. Rizal, Ins. Philipp. (H. S. YATES).

CALYPTRA Theiss. et Sydow, Ann. Mycol. 15., 1917, p. 478. — Mycelium dematiaceum membranaceum, non setulosum. Perithecia insidentia, globosa, levia, dematiacea mucosa, ostiolo indistincto. Asci clavati, fasciculati, octospori. Sporidia hyalodidyma, ex elongata fusioidea. Typus sistit *Oalyptra cordobensis* (Speg.) Th. et Syd., et *O. capnoides* (Ell.) Th. et Syd. 4616

ADELOPUS Theiss. nom. nov., in Theiss. et Syd., Ann. Mycol. 15., 1917, p. 482. — Syn. *Cryptopus* Theiss. 1914, Ann. Myc. 12., p. 72, nec Lindl. (Orchideae). — Mycelium sparse dematiaceum. Perithecia superficialia pede cylindraceo subepidermico praedita, depresso globosa, levia, indistincte ostiolata, coriacea, nigra. Asci basilares, octospori, clavati. Sporidia hyalodidyma. — Typus gen. *Adelopus balsamicola* (Peck sub *Asterina*) Theiss. 4617

CAPNODINULA Spegazzini, Notas Mycologicas « Physis » t. IV, 1918, p. 288. — Subiculum normale; perithecia subglobosa ostiolata non v. vix umbonata, glabra; asci octospori; sporidia hyalodidyma. — Typus generis *Capnodinula trichodea* (Rehm) Spegaz. l. c. — *Asterella trichodea* Rehm, Syll. XVI p. 1141.

1. **Capnodinula Tonduzi** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 189, cum icon. — Subiculum late effusum tenuiter subpelliculosum nigrum exhyphopodiatum; perithecia solitaria v. hinc pauci-gregaria (3-5), pusilla 75 μ diam. ex hemisphaerico sublenticularia, membranacea parenchymatica, minute umbonato-ostiolata, atro-olivacea, glabra sed basi hyphis nonnullis radiantibus radicata; asci cylindraceo-subclavulati, apice obtusissime rotundati, deorsum sensim in pedicello brevi crassiusculoque attenuati, 25-30 \times 10, aparaphysati, octospori; sporae parvae elongato-subellipticae, non v. vix subclavulatae, medio 1-septatae non constrictae, hyalinae, 10-11 \times 2,5-3. 4618

Hab. in foliis et in sarmentis vivis *Vitis caribaeae* (Vitaceae), prope San José Costarica, America trop.

MICROTYLE Spegaz., Rel. mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, p. 96 et icon. p. 179. — Pulvinuli atri capnodiacei superficiales parvi compactiusculi granuloso-velutini subiculo dematieo exhyphopodiatum; perithecia globosa sessilia ostiolato-pertusa atra coriacea glabra, ima basi pilis numerosis erectis simplicibus cinctis; asci octospori paraphysati; sporidia angusta,

medio 1-septata, hyalina. — Genus notis plurimis ad *Capnodium* vergens, pulvinulis parvis compactiusculis non diffusis nec relaxatis, peritheciis basi setulis cinctis distinctissimum.

1. *Microtyle* *Bergi* Spegaz., l. c. — Maculis nullis; pulvinulis hypophyllis inordinate laxaque longitudinalibus, umbrino-fuligineis; peritheciis constipatis late umbilicato-perforatis (20 μ), subglobosis 100-150 μ diam., pilis brevibus, 25-100 \times 5, densiusculis erectis obtusis basi cinctis, ascis subfusoides apice rotundatis deorsum breviter cuneato-pedicellatis, 80 \times 8, paraphysibus filiformibus septulatis parum longioribus obvallatis, octosporis; sporidiis fusoidesubacicularibus utrinque acutiusculis, 16 \times 3, distichis v. tristichis, ad septum non constrictis.

Hab. ad folia *Merostachydis* sp. (Graminaceae), Corcovado prope Rio de Janeiro, America austr. (C. BERG). — Habitus *Dimerinae Negerianae* Thsz. sed ostiolo perithecorum diversa.

Sect. 2. *Phaeodidymae*

BALLADYNA Racib. — Syll. XVI p. 411, XXII p. 41.

1. *Balladyna Melodori* Syd., Philipp. Journ. of Sc., v. 9. Sect. C., n. 2., 1914, p. 160. — Amphigena, saepius epiphylla, plagulas primitus orbiculares 3-10 mm. diam., atras opacas tandem confluentes et magnam folii partem obtegentes formans; mycelio ex hyphis valde irregulariterque ramosis fuscis vel obscure brunneis 5-9 μ crassis saepius binis trinis lateraliter connatis torulosis irregularibus composito; hyphopodiis alternantibus, irregulariter distributis, continuis, globulosis usque oblongis, fuscis, 8-12 μ longis, 6-9 μ latis; setis myceliis numerosis, erectis, rigidis 80-110 μ longis, basi 4-8 μ crassis, apicem versus attenuatis et acutis, ad apicem 2-2,5 μ crassis, obscure brunneis, opacis, continuis; peritheciis numerosis, sessilibus vel brevissime stipitatis, globosis usque ovatis vel breviter piriformibus, 50-65 μ altis, 40-48 μ latis, monoascigeris, pariete indistincte parenchymatico sordide olivaceo-brunneo vel sordide flavo-brunneo tenaci; ascis globosis vel subglobosis, 40-50 μ longis, 35-40 μ latis, paraphysatis; sporidiis oblongis utrinque late rotundatis, medio 1-septatis et constrictis, levibus, primitus hyalinis, tandem olivaceo-brunneis, bi-tristichis, 17-19 \times 4-4,5.

Hab. in foliis *Melodori* (Anonaceae), Palawan Taytay, Ins. Philipp. (MERRILL).

2. *Balladyna Ledermannii* Sydow, Engler' Botan. Jahrbüch. 54., 1916, 4621

p. 254. — *Amphigena*, saepius hypophylla, plagulas minutas orbiculares, 2-8 mm. latas, atras formans; mycelio ex hyphis tenuibus 3-4 μ crassis ramosis rectiusculis, sed ramosis et densiuscule intertextis septatis fusciculis composito; hyphopodiis numerosis, alternantibus, continuis, globosis, v. subglobosis, integris, raro leniter lobulatis, 3-4,5 μ diam.; setis erectis, rectis vel subrectis, ad apicem obtusis, brunneis, numerosis, praecipue circa perithecia sitis, 50-120 \times 4-6, ad apicem vix attenuatis; peritheciis dense stipatis, subsessilibus, globosis, 40-65 μ diam., 1-pauciascigeris, tenaci-membraneis, contextu flavo-fusco ex cellulis 4,5-6 μ latis composito; ascis ovatis, 32-38 \times 20-25, octosporis; sporidiis oblongis, utrinque obtusis, pallide olivaceis, crasse et obscurius 1-septatis, 13-16 \times 4-4,5, loculo infero subinde parum longiore.

Hab. in foliis vivis *Bignoniaceae* cujusdam, prope Sepik Nova-Guinea nord.-or., Africae (LEDERMANN).

3. *Balladyna Butleri* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 388 4622

fig. 7. — Hypophylla, velutina, maculas atras oblongas 2-10 mm. longas formans; subiculo superficiali, ex hyphis fuscis 8-10 μ cr. irregulariter ramulosis anastomosantibusque hyphopodia pauca primitus 1-dein pluricellularia et perithecia immatura obpiriformia gerentibus composito; setis subiculo numerosissimis, erectis, rectis v. subrectis, apice obtusis, fusco-brunneis, opacis, apice dilutioribus, 150-220 μ long., basi 8-10 μ cr., sursum angustioribus; peritheciis numerosissimis, dense stipatis, obpiriformibus vertice breviter obtuseque conicis, basi rotundatis, 50-75 μ altis medio 45-60 μ latis, in hyphis cellula stipitiformenti lateraliter ortis et quasi stipitatis, praeterea lateraliter circa hanc cellulam hyphis paucis tenuibus suffultis, parenchymatice contextis, pariete sub microscopio dilute brunnea ex cellulis polyedricis 6-10 μ latis superficie tenuiter areolatis composito, circa ostiolum subhyalino, ascis 1-2 tantum includentibus; ascis aparaphysatis, ovatis v. subsphaericis, 30-40 \times 20-35, octosporis, apice crassiuscule tunicatis; sporidiis conglobatis, elliptico-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, diutissime hyalinis, sero dilutissime brunneolis tandemque ut videtur brunneis, 18-22 \times 9-10.

Hab. in foliis *Bambusa* sp. (Graminaceae), Khasi Hills Assava, Indiae or. (E. J. BUTLER) — *B. velutinae* (B. et C.) v. Höhn. et *B. amazonicae* v. Höhn. proxima, a prima differt hyphopodiis paucis pariete perithecorum pallide brunnea, ab altera setulis numerosis, ab utraque colore sporarum.

4. *Balladyna uncinata* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 546. — 4623
Epiphylla plagulas minutas omnino superficiales oblongas 1-2 mm. longas atres tenues formans; mycelio ex hyphis densissime breviterque ramosis fuscis v. brunneolis 7-9 μ latis, septatis composito; setis numerosissimis ad basim semper plus minus valde uncinatis v. semel etiam sigmoideo-curvatis, ceterum erectis v. fere erectis, crasse tuni-
catis, tota longitudine pellucidis, septatis (articulis 30-50 μ long.), dilute olivaceo-fuscis, ad apicem obtusis, 150-250 \times 4-8; peritheciis dense stipatis, sessilibus v. breviter stipitatis, ovato-globosis v. ovatis, superne indistincte ostiolatis, basi late rotundatis, olivaceo-brun-
neis, tenaci membranaceis, 60-95 μ altis, 50-65 μ latis, plerumque monoascigeris, contextu ex cellulis irregulariter polyedricis 8-11 μ diam. composito; ascis ovato-globosis, aparaphysatis, 35-44 \times 30-35; sporidiis parallele positiss, ellipsoideo-oblongis, medio 1-septatis et parum constrictis, fuscis, 24-26 \times 9-11.

Hab. in foliis languidis *Schizostachyi* sp. (Graminaceæ), Antipolo prov. Rizal, Ins. Philippin. (M. RAMOS).

5. *Balladyna affinis* Syd., Ann. Mycol. 14., 1916, p. 74. — Epiphylla, pla- 4624
gulas orbiculares dein plus minus confluentes 2-8 mm. longas gri-
seas tenues formans; mycelio parum evoluto, ex hyphis brevibus dense ramosis fuscis 5-8 μ latis composito, hyphopodiis capitatis numerosis, 18-25 μ longis, 8-10 μ latis, obtusis, integris, cellula ba-
sali brevi; hyphopodiis mucronatis non visis; setis myceliis par-
cissimis, rectis vel subrectis, simplicibus, apice late rotundatis, tota longitudine pellucidis 100-175 \times 7-9, superne saepe leniter tor-
tuosis; peritheciis sparsis, globosis, 100-150 μ diam.; ascis ovato-
globosis, 2-3-sporis; sporidiis cylindraceis, obtusis, fuscis, 4-septatis, parum constrictis, 25-30 \times 9-12; conidiis obclavatis vel obclavato-
fusoideis, basi rotundatis fusciculis 3-septatis, non constrictis, 30-
35 \times 9-8, cellula superiore longissima et angusta.

Hab. in foliis *Cecropiae* (Moraceæ), Seringal S. Francisco, Rio Acre, Brasiliæ (E. ULE). — *Affinis* *Ball. amazonicæ*.

BALLADYNOPSIS Theiss. et Syd., Ann. Mycol. 15., 1917, p. 475. — 4625
A *Balladyna* differt peritheciis polyascis nec monascis. — Typus
Balladynopsis philippinensis Syd. (sub *Henningsomyces*).

BALLADYNELLA Theiss et Syd., Ann. Mycol. 15., 1917, p. 478. — 4626
Est *Balladyna* hyphopodiis et setulis destituta. — Typus gen. *Balladynella amazonica* (v. Höhn.) Th. et Syd.

NEOHOEHNELIA Theiss. et Syd., Ann. Mycol. 15., 1917, p. 476. — 4627

Mycelium membranaceum exhyphopodiatum, setulosum. Perithecia ovoideo-erecta, crasse membranacea, nigra, astoma, breviter pedicellata, setulosa. Asci pauci, ex ellipsoidei clavati, octospori. Sporidia phaeodidyma. — Species typica *Neohoehnelia oligotricha* (Mont.) Th. et Syd. (sub *Henningsomyces* v. Höhn.).

HENNINGSOMYCES Sacc. — Syll. XVII p. 689.1. **Henningsomyces pusillimus** Syd., Philipp. Journ. of Sc., v. 9., Sect. 4628

C., n. 2, 1914, p. 162. — Hypophylla, plagulas orbiculares vel irregulares 1-2 cm. diam. griseo-fumosas formans; mycelio tenuissimo, ex hyphis longiusculis non vel parce ramosis remote septatis (articulis 30-50 μ longis) dilute olivaceo-brunneis tenuiter tunicatis haud hyphopodiatis, 2,5-3,5 μ crassis, composito; peritheciis in mycelio dense sparsis hyphis superficialiter insidentibus, una vel pluribus hyphis suffultis, globosis vel ovato-globosis, sessilibus vel centro brevissime stipitatis, 30-45 μ diam., haud ostiolatis contextu tenaci obscure olivaceo-brunneo minute parenchymatico ex cellulis 4-5 μ diam. composito, superne setis paucis (4-8) erectis rectis vel subrectis continuis apice acutis fuscis (3-5) in quoque perithecio, globosis usque ovato-globosis, crassiuscule tunicatis, 20-24 μ diam., non vel indistincte paraphysatis, octosporis; sporidiis oblongis, circa medium 1-septatis, vix constrictis, 12-15 μ longis, 3,5-4 μ latis.

Hab. in foliis *Adinae* sp. (Rubiaceae), Palawan Taytay, Ins. Philipp. (MERRILL).

2. **Henningsomyces philippinensis** Syd., Philipp. Journ. of Sc. v. 9, Sect. 4629

C., n. 2, 1914, p. 161. — Plagulas epiphyllas opacas atras perexiguas 150-300 μ tantum latas vel etiam confluendo majores et usque 2-3 mm. diam. metientes formans; mycelio superficiali, matrici arcte adnato, ex hyphis longiusculis remote septatis (articulis 20-50 μ longis) obscure olivaceo-brunneis vel atro-olivaceis parum ramosis 5-7,5 μ crassis tenuiter tunicatis composito; peritheciis ad latera hypharum mycelii sessilibus vel brevissime stipitatis, plerumque perfecte globosis et 60-70 μ diam., haud ostiolatis, contextu tenaci minute parenchymatico atro-olivaceo, setis paucis (2-6) rectis vel parum flexuosis ad apicem obtusis concoloribus vel pallidioribus plerumque 20-50 μ longis et 5-6 μ latis obsitis; ascis paucis in quoque perithecio, ellipticis, ovatis vel oblongis, subsessilibus, 45-50 μ longis, 22-25 μ latis, octosporis, aparaphysatis vel indistincte

paraphysatis; sporidiis tristichis vel conglobatis, oblongis, utrinque rotundatis, medio vel circa medium 1-septatis et leniter constrictis, ex hyalino brunneis, levibus, 20-25 μ longis, 7,5-8 μ latis.

Hab. in foliis vivis *Morinda* e sp. (Rubiaceae), Palawan Tay-tay, Ins. Philipp. (MERRILL).

Sect. 3. Hyalophragmiae

SCORIAS Fr. — Syll. I, p. 83.

1. *Scorias paulensis* P. Henn., Hedw. vol. 48 (1908) p. 6. — Mycelio 4630 atro crustaceo, epiphylo, effuso; hyphis repentibus septatis, radiatis, fusco-atris; peritheciis clavatis vel piriformibus, 150-200 \times 30-80, e fibris fuscis compositis; ascis clavatis vel oblongo-ovoideis, 4-sporis, 20-30 \times 6-8; sporidiis conglobatis, fusoides vel clavatis, 3-septatis, hyalinis, 10-12 \times 3-3,5. Conidia ovoidea vel ellipsoidea, fuscidula, 1-septata, 5-9 \times 3-4.

Hab. in foliis *Justiciae* sp. (Acanthaceae), S. Paulo, Capital, Brasilia.

2. *Scorias capitata* K. Sawada in Special Rep. Agr. Sper. Station Formosa, n. 11, 1915, pp. 123-124, tab. 4 fig. 19-23, t. 4., ii; Mycologia IX, 1917, p. 170. — Mycelio in foliis late effuso nigricante; hyphis catenulatis, fuliginis, 2,5-5 μ cr.; hyphis fertilibus fuliginis, ramosis, forma variabilibus sed plerumque conoideis, cylindraceis, fusoides v. ellipsoideis, 110-247 \times 52-75, apice constrictis et peritheciis terminatis; peritheciis nigris, subovatis v. orbicularibus, 60-83 \times 50-78; ascis numerosis clavatis, obtusis, hyalinis, 30-35 \times 9-12, 6-8-sporis; sporidiis e fusoides clavato-fusoides, utrinque obtusis, hyalinis, 3-septatis, 10-11,5 \times 3-3,5.

Hab. in foliis *Theae sinensis* (Theaceae), Formosa, Japonia (Y. FUJIKURO).

HYPOCAPNODIUM Spegazzini, Notas Mycologicas, « Physis » t. IV, 1918, 4632 p. 287. — Subiculum normale; perithecia subglobosa ostiolata, non v. vix umbonata, hispidula v. hirsuta; ascis 8-sporis; sporae hyalophragmiae. — *H. setosum* (Zimm.) — Sacc., l. c., XVII, p. 557. Typus.

AITHALODERMA H. et P. Sydow, Ann. Mycol. XI, 1913, p. 257, XV, 1917, p. 474 (Ethym. *aithalos* et *derma* cutis). — Mycelium superficiale, crustaceum, facile secedens, atrum, conidia triposporioidea generans. Pycnidia biformia, alia conica v. conico-globosa, alia la-

geniformia. Pycnidiosporae continuae, minutae, hyalinae. Perithecia conica v. conico-globulosa, minuta, atra, ostiolo plano praedita, contextu parenchymatico, tenaci, coriaceo, superne setis crassis obsita; asci crasse clavati, octospori, aparaphysati. Sporidia transverse pluriseptata hyalina.

1. *Aithaloderma clavatisporum* H. et P. Sydow, l. c. p. 257 fig. III, XV 4633 1917, p. 476, fig. 30, a-d. — Longe lateque effusum, epiphyllum, superficiale, tenuissime pelliculosum, facile secedens, totam folii superficiem obtegens, atrum v. atro-olivaceum, opacum; mycelio rete densissimum efformante, ex hyphis anastomosantibus plerumque longitudinaliter connatis crassioribus 4-6 μ cr. et obscure olivaceis v. brunneis tenuioribus 3-4 μ cr. et plerumque dilutioribus flavis usque flavo-brunneis crebre septatis (articulis 5-10 μ long.) composito, hinc inde conidia triposporioidea plerumque 3-radiata (radiis 28-40 μ long. e 2-septatis) olivaceo-brunnea generante, hyphis paucis etiam in articulos 13-16 μ longos oidiiformiter secedentibus; pycnidiis biformibus, aliis elongato-lageniformibus, 120-400 μ long., 15-20 μ cr., erectis v. parum curvatis, inferne atris opacis, superne saepe dilutioribus et pellucidis, plerumque ad apicem (subinde etiam in medio) abrupte inflatis ibique 25-40 μ cr.; aliis breviter conoideis 60-90 μ diam., olivaceo-brunneolis, contextu tenaci parenchymatico, superne indistincte ostiolatis; sporulis breviter cylindraceis, continuis, hyalinis, utrinque minute guttulatis, 3,5-5 \times 1,5-2; peritheciis aequaliter sparsis, breviter conoideis, 60-90 μ diam., atris, tenacibus, coriaceis, distincte ostiolatis, parte superiore (praecipue circa ostiolum) setis paucis v. compluribus crassis atris 10-20 μ long. 3,5-5 μ latis subinde elongatis opacis continuis obsitis contextu parenchymatico, olivaceo-brunneo, ex cellulis 6-8 μ diam. formato; ascis subclavatis v. subsaccatis, apice obtusis et incrassatis, basi brevissime stipitatis, 30-36 \times 14-20, octosporis, aparaphysatis; sporidiis 3-4-stichis v. conglobatis, clavatis, e basi ad apicem sensim latioribus, 3-4-septatis, subinde etiam 5-septatis, ad septa non constrictis, hyalinis, 24-26 \times 5-6.

Hab. in foliis vivis *Voacangae globosae* (Apocynaceae), Los Baños, ins. Philippinensium (C. F. BAKER).

2. *Aithaloderma longisetum* H. et P. Sydow, Ann. Mycol. XII, 1914, 4634 p. 545, XV, 1917, p. 475 fig. 30 h. — Epiphyllum, folii superficiem plerumque omnino crusta tenui facile separabili superficiali obducens, pelliculosum, atrum v. atro-olivaceum, opacum; mycelio rete densissimum efformante, ex hyphis anastomosantibus saepe longi-

tudinaliter connatis crassioribus 5-9 μ cr. fuscis v. olivaceo fuscis tenuioribus 3-5 μ cr. et plerumque paullo dilutioribus crebre septatis (articulis 6-10 μ long.) composito, hinc inde conidia triposporioidea plerumque triradiata (radiis 30-46 μ long. et 2-septatis) olivaceo-brunnea generante; pycnidiis elongato-lageniformibus 100-200 μ long., 12-20 μ latis erectis v. parum curvatis atro-olivaceis opacis non v. parum inflatis; pycnidiis conicis non visis, peritheciis densiuscule sparsis, breviter conoideis, 60-85 μ diam., atro-olivaceis, tenacibus ostiolatis, setis paucis (1-8) atris v. atro-olivaceis opacis septatis 80-160 μ long. ad basim 4-6 μ crassis superne angustioribus obsitis, contextu parenchymatico obscure olivaceo ex cellulis 7-9 μ diam. formato; ascis subclavatis v. saccato-clavatis, apice obtusis, vix v. brevissime stipitatis, aparaphysatis, 30-36 \times 17-19, 8-sporis; sporidiis 3-4-stichis, clavatis, e basi ad apicem sensim latioribus, 2-4 septatis, non constrictis, diu hyalinis, tandem dilutissime olivaceis (praecipue in asco), 20-26 \times 4,5-6.

Hab. in foliis *Coffeae libericae* (Rubiaceae), Lamao pr. Bataan, Luzon Ins. Philippin. (E. D. MERRILL). — Ab *A. clavatisporo* Syd. setulis longioribus sporis pallide olivaceis diversum.

CHAETOTHYRIUM Speg. — Syll. IX p. 1061, XVI p. 636, XXII p. 521 Syn., sec. Theissen et Sydow (Ann. Mycol. 15., 1917, p. 477), *Zuckalia* Sacc. 1891, *Chaetasterina* Bubak 1909.

1. *Chaetothyrium colchicum* Woronichin, Les fumagines du Departement de Sotshi, in Bull. of Applied. Bot., n. 6, p. 797, tab. 136, fig. 976-979. — Mycelio atro, crustaceo epiphylo, praecipue rectangulariter ramoso; hyphis saepe paralleliter confluentibus vel crustas parenchymaticas formantibus; cellulis hypharum cylindraceutis, ad septa constrictis, usque 12-15 μ longis et 6-7 μ crassis, olivaceo-brunneis; peritheciis globosis, leviter compressis, 50-80 μ altis et 60-90 μ latis, crusta parenchymatica hypharum conoidea, ostiolata, corona setarum (8-20) usque 60 μ long. et 7,5 μ crass. unicellularium ornata tectis; ascis late clavatis vel ovalibus, brevissime pedicellatis, 42-52 \times 20-30, aparaphysatis, octosporis; sporis clavatis, parallelibus, 22-27 \times 6, 4-6-septatis.

Hab in foliis vivis *Ilicis Aquifolii* L. (Aquifoliaceae): soc. *Antennulariellae fuliginosae* Woronichin: Caucasus, gub. Tshernomorskaja prope Sotshi (N. WORONICHIN); in foliis vivis *Citri* sp. (Rutaceae), Caucasus, gub. Tshernomorskaja, prope Sotshi (KUSHKE !); in foliis vivis *Citri* sp., Caucasus, prov. Batum (KUSHKE !).

2. *Chaetothyrium Rickianum* Theissen, Ann. Mycol. XI, 1913, p. 493, 4636 fig. I, XV, 1917, p. 474, fig. 31. — Epiphyllum. Maculis fumosis irregulariter rotundatis 1 cm. circ. diam. quandoque confluentibus; subiculo tenue hinc inde sub lente prominenti-setuloso, hyphis 3-4 μ cr. crebre articulato-constrictis, laxis efformato; setis acutato-incurvatis 20-30-articulatis, plerumque 200-240 μ long.; perithecia aegre visibilia, subiculum elevantia globoso-depressa, usque 200 μ lata 130 μ alta, ostiolo 10 μ lato, hyphis minutis radiantibus ornato-clauso; ascis hymenio basilari efformantibus e cylindraceo clavatis subcylindraceis, 50 \times 16 (cum sporidiis 2-3-stichis) v. 65 \times 10 (cum sporidiis) (1-2-stichis), aparaphysatis; sporidiis elongato-ellipsoideis hyalinis triseptatis, non constrictis, 12-16 \times 3.

Hab. in foliis *Dicotyledoneae* ejusdam ignotae, Brasilia (RICK).

ZUKALIA Sacc. — Syll. IX p. 431, XI p. 268, XIV p. 17, XVI p. 416, XVII p. 543, XXII p. 42.

1. *Zukalia paraënsis* P. Henn., Hedw. vol. 48 (1908) p. 104. — Maculis 4637 mycelii epiphyllis, rotundatis, olivaceo-fuscis; hyphis repentibus ramosis, septatis, fuscis, 4-5 μ crassis; peritheciis gregariis, subglobosis, verruculosi, atris, 30-100 μ diam.; ascis clavatis, obtusis, octosporis, 44-52 \times 10-14; sporidiis oblique monostichis vel subparallelis, oblonge clavatis, vertice rotundatis, guttulatis, 3-7-septatis, hyalinis, 20-30 \times 3,5-4.

Hab. in foliis *Anacardii occidentalis* (Anacardiaceae), in horto botan. Goeldi, Parà, Brasilia.

2. *Zukalia caucasica* Woronichin, Les fumagines du Département de 4638 Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 784 (1915), fig. 962-965, tab. 134 fig. 1. — Mycelio atro, late effuso, crustaceo-membranaceo, paginam foliorum superiorem omnino tegente; hyphis brunneis 2-4-stratosi, parce ramosi, praecipue rectangulariter vel cruciatim dispositi; cellulis hypharum cylindraceis vel oblongo-ovalibus, glabris, 18-28 \times 6-8 (-10), nonnunquam globosis, toruloides; conidiis triposporioides, 4 (-3) radiatis, olivaceis; radiis 5-7-cellularibus superne attenuatis, 65-75 \times 12-13,5; peritheciis globosis, parvis, leviter compressis, usque 276 μ diam., membranaceis ostioliatis basi setulis pluricellularibus, 100-150 \times 7-10, brunneis ornatis; ascis ovalibus, aparaphysatis octosporis, 60-75 \times 30-45; sporidiis hyalinis, fusoides, obtusis plerumque leviter curvatis, 3-4-septatis, 30-33 \times 7-8.

Hab. in foliis vivis *Taxi baccatae* L. (Coniferae), Caucasus, gub. Tshernomorskaja, prope Chosta (N. WORONICHIN).

3. *Zukalia erysiphina* Syd., Ann. Mycol. 14., 1916, p. 259. — Mycelio co. 4639
pioso sed tenui, longe effuso, niveo, ex hyphis longissimis, hyalinis, 3-4 μ cr. vix septatis, flexuosis, crasse tunicatis hinc inde geniculatis, non ramosis composito; peritheciis in mycelio copiosis, superficialibus, plerumque lata basi sessilibus, globoso-conicis, mox longioribus quam latioribus, mox e contra latioribus quam longioribus, 50-75 μ diam., astomis, glabris, levibus, contextu unistrato ex cellulis angulato-globosis, 6-9 μ diam. obscure olivaceo-brunneis v. castaneo-brunneis composito; ascis paucis (circ. 3-6) in quoque perithecio, globosis v. ovato-globosis, sessilibus, aparthysatis, 20-28 μ diam., ad apicem crasse tunicatis, octosporis; sporidiis conglobatis, oblongis v. clavulatis, 3-septatis, non constrictis, hyalinis, 12-16 \times 3,5-4,5.

Hab. in foliis *Quercus* sp. (Cupuliferae), Shana Odyar, Kumaon Himalaya, Asiae (BUTLER).

4. *Zukalia lauricola* Speng., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 38 (1912). — Peritheciis sparsis vel laxe gregariis, superficialibus, udis subglobosis, siccis eximie hemisphaerico-cupulatis, 150-180 μ diam., membranaceo-coriacellis, astomis, glabris, contextu parenchymatico atro vix pellucido, subculo parvissimo ex hyphis dense intertextis, articulato-toruloides (articulis 10-25 \times 5) chlorino-olivaceis efformato insidentibus; ascis ellipsoideis, utrinque angustatis, basi in pedicellum brevem crassumque productis, octosporis, aparthysatis, 70 \times 18; sporidiis conglobatis, fusoides, rectis vel leniter inaequilateris, utrinque acutiuscule rotundatis, ad septa valide constrictis, 30 \times 6.

Hab. in foliis vivis *Ocoteae diospyrifoliae* (Lauraceae), in silvis prope Calilegua, Salta: Argentina.

5. *Zukalia transvaalensis* Doidge, Trans. R. Soc. South Afr. V, 1917, 4641
p. 721 et 742, t. 58 fig. 10. — Epiphylla, maculas tenues effusas efficiens; hyphis radiatis, ramosis anastomosantibus, 7-8 μ crassis, e cellulis 30-32 μ longis compositis; hyphopodiis unilateralibus, plerumque latioribus quam longis, 8-10 \times 11-14; peritheciis sparsis, numerosis, globosis, atris, 130-160 μ diam.; ascis octosporis, ellipsoideis v. ovatis plerumque leniter curvatis, 70-90 \times 18-22; paraphysibus nullis; sporidiis distichis v. trifariis, clavatis, hyalinis, 5-septatis, utrinque obtusis, 45-55 \times 5-7.

Hab. in foliis *Eugeniae Zeyheri* (Myrtaceae), Woodbusch,

Zoutpansberg, Africa austr. (E. M. DODGE).

6. *Zukalia setosa* Woronichin, Les fumaginees du Département de Sotshi, 4642
in Bull. of Applied Bot. VIII, n. 6, p. 788, tab. 134 fig. 5-6, tab. 136 fig. 966 971. — Mycelio griseo, effuso, crustaceo, epiphylllo; hyphis dilute-brunneis vel hyalinis, plerumque 1-stratosis, ramosis, partim rectangulariter, ramulis anastomosantibus vel crustas e cellulis parenchymaticis, 3-4 μ diam. formantibus, setis praeditis; cellulis hypharum plerumque cylindraceis vel oblongo-ovalibus, 7-15 \times 3-(5); setis atro-brunneis, rectis vel curvatis, apicibus acutis, 180-230 μ longis, usque 6 μ crassis, hyphis hyalinis usque ad apices setarum arreptentibus, tectis; peritheciis parvis, globosis, ostiolatis statu sicco fere patelliformibus, 220-230 μ diam.; ascis oblongo-ovalibus vel cylindraceis, 60-70 \times 15-18; sporis octonis, fusoides, rectis, hyalinis, 19,5-22,5 \times 6-7,5, 4-5 septatis; conidiis triposporioideis, parvissimis, 5-radiatis, radiis 3-4 cellularibus, 20-30 μ longis, supra attenuatis, cellulis guttulatis.

Hab. in foliis vivis *Pruni Laurocerasi* L. (Rosaceae), Caucasus, gub. Tshernomorskaja, pr. Chosta; in foliis vivis *Rhododendri pontici* L. (Ericaceae), Caucasus, gub. Tshernomorskaja, pr. Bahukor (N. WORONICHIN).

7. *Zukalia europaea* v. Höhn., Fragm. zur Mykol. 797, in Sitzgsb. 4643
Akad. Wiss. Wien, CXXII, 1, p. 283 (1913). — Subiculo parum effuso ex hyphis 1-pauci-stratosis, brunneolis, 3-8 μ cr., saepe membranaceo-concrescentibus, brevi-cellulosis, subtorulosis guttulatis composito; peritheciis atris, subglobosis, lata basi subiculo insidentibus, 150-200 μ diam., non collabescentibus, ob papillas atras 10-12 μ diam., dense sparsas scabris, in acervulos parvos congestis, ostiolo minuto obsoleto, contextu paucistratoso, e cellulis rotundato-polyhedricis, usque ad 12 μ diam. composito; ascis copiosis, sessilibus, aparaphysatis, fusoides-clavatis, apice attenuato-rotundatis, 42-58 \times 8-12, octosporis; sporidiis 2-3-stichis, oblongo-fusoides, rectis, utrinque acutiusculis et gelatinoso-apiculatis, 4-cellularibus, hyalino-chlorinis, 16-20 \times 4-5,5.

Hab. in pagina superiore foliorum *Rubi fruticosi* (Rosaceae), Sonntagsberg, Austria infer. (STRASSER).

8. *Zukalia nantoensis* K. Sawada, Mycologia 9, 1917, p. 251 (ex Rep. 4644
Agricult. Stat., Taiwan (Formosa) Mart. 1915, p. 123, tab. 4 fig. 14-18). — Pycnidiis et peritheciis epiphyllis, raro hypophyllis in subiculis 2-5 mm. latis, lichenoideis, ex hyphis fuliginis, crasse tunicatis, 8 μ cr. septatis coalescentibus formati; hyphopodiis ob-

longis, substipitatis 18-25 μ long. intermixtis; pycnidii globulosis, nigris, sessilibus v. substipitatis, subiculo insertis, 63-95 μ diam.; sporulis ellipsoideo-oblongis, levibus, pallide brunneis, 1-cellularibus, 2-guttatis, 6-8 \times 3-4; peritheciis similibus 130-180 μ diam.; ascis copiosis oblongo-clavatis, v. ovoideo-oblongis, 33-50 \times 10-12, octosporis; sporidiis oblongis v. breviter clavatis, medio 1-septatis, hyalinis, utrinque obtusis, 9-13 \times 3,5-5.

Hab. in foliis *Theae sinensis* (Theaceae) cui valde noxia, in Ins. Formosa, pluribus locis.

9. *Zukalia Theae* K. Sawada, Special Rep. Agr. Exp. Station Formosa, 4645 n. 11, 1915, p. 122, tab. 4 fig. 10-13, t. 4., ii; Mycologia, IX, 1917, p. 170. — Peritheciis globosis, nigris, 67-135 μ diam.; subiculo nigro; hyphis filiformibus, primum pallidis, dein brunneis, ramosis, septatis, 3-6 μ cr.; ascis numerosis, setis 6-8 obscure brunneis, obtusis, 5-6 septatis, circumdatis, 70-100 \times 4; ascis octosporis, hyalinis, clavatis, fusoides, 68-90 \times 13-16; sporis hyalinis, obovatis, ellipsoideis v. clavatis, 3-septatis, 17-23 \times 6-7.

Hab. in foliis et ramulis *Theae sinensis* (Theaceae), Formosa, Japonia (K. SAWADA).

LIMACINIA Neger. — Syll. XIV p. 474, XVI p. 1127, XVII p. 556, XXII p. 62. — Syn. sec. Theissen et Sydow (Ann. Mycol., 15., 1917, p. 478), *Xystozukalia* Theissen, 1916, Verh. zool.-bot. Ges. Wien, p. 357.

1. *Limacinia spongiosa* Arnaud, Ann. École nat. Agric. Montpell. X, 4646 1911, p. 325, icon. p. 282. — Subiculo ramicolo, nigro, spongioso, 1-5 mm. crasso; peritheciis in mycelio immersis vel erumpentibus, minutis, 150 μ diam., globosis, setosis; ascis tereti-clavatis, 8-sporis, aparaphysatis, plerumque 70 μ longis; sporidiis ellipsoideo-fusoides, 3-septatis, dilute fuscidulis, 20-26 \times 6-9, non v. vix constrictis.

Hab. in ramis *Nerii Oleandri* (Apocynaceae), Montpellier Galliae merid.

2. *Limacinia biseptata* Sacc., Ann. Mycol. XIII, n. 2 (1915) p. 127. — 4647 Effusa, imprimis epiphylla, tenuis, confluentis, castaneo-olivacea (vix capnodiacea) non vere secedens; hyphis repentibus filiformibus, parce ramosis, dilute fuligineis, 4-5 μ cr., obsolete septatis, gutturalis; peritheciis, globulosis, superficialibus ex hyphis orientibus, demum latiuscule apertis nigricantibus, 90-100 μ diam.; asci clavulatis, subsessilibus, apice subinde obtuse abrupteque tennatis, 90-100 \times 9, non v. obsolete paraphysatis, octosporis; sporidiis di-

stichis tereti oblongis, curvulis utrinque rotundatis, $16 \times 4,5-5$, dilutissime brunneolis, 2-septatis, non constrictis; ceratopycnidiis peritheciis intermixtis, cylindricis, nigris, $300-400 \times 80$, sursum sensim cuspidatis, vel apice inflatis, pertusisque; sporulis non visis.

Hab. in foliis emorientibus *Macaranga* sp. (Euphorbiaceae), Los Baños, Ins. Philipp. (BAKER). — Mycelii colore et sporidiis bi-septatis videtur species distincta.

3. *Limacinia imperspicua* Sacc., Notae Myc. XXIII, p. 62 (Acc. Ven. Trent. 4648 1917). — Epiphylla, maculas subrotundas 3-5 mm. diam. nigricantes sed fere imperspicuas formans; peritheciis subglobosis, leviter papillatis, nigris, $80-90 \mu$ d., mycelio filiformi intricato adpresso, fuligineo insertis, contextu sinuoso atrofuligineo; ascis oblongis, sessilibus, apice rotundatis, 40×14 , paraphysatis, 8-sporis; sporidiis distinctis, cylindræis, curvulis (fere allantoideis), 4-septatis, utrinque obtusulis, non constrictis, $14-16 \times 3,5$; ceratopycnidiis interspersis e basi bulbosa cylindræis sursum tenuatis sed summo apice obtusis, $190-200 \times 12$, apice tantum 6μ cr., athermis (hucusque sterilibus inventis).

Hab. in foliis languidis *Celtidis* sp. (Ulmaceae), Los Baños, Ins. Philipp. — Habitus vix capnodiaceus, sed ejus characteres adsunt.

Sect. 4. *Phaeophragmiæ*

CAPNODIUM Mont. — Syll. I p. 73, IX p. 438, XI p. 270, XIV p. 476, XVII p. 555, XXII p. 59. — Syn. *Polychæton* O. Ktze 1891 (sec. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 473).

1. *Capnodium juniperinum* Baccarini, F. Eritr. II, n. 72 in Annali di 4649 Bot. 1917. — Mycelio fusco-nigro, ramoso articulado, articulis subglobosis, saepius $9-12 \mu$ latis, conidia brunnea simplicia, didyma vel triseptata pleurogena gignentibus; spermogoniis subhaemisphaericis a 54 ad 90μ latis; spermatis hyalinis ellipticis $4-8 \mu$; pycnidiis lageniformibus atro-brunneis, ore hyalino fimbriato, levibus, tunc piriformibus atque sessilibus, 270×81 , tunc pedunculatis 720×90 ; sporidiis vero conformibus, bi-tri-septatis, loculis interdum septo longitudinali percursis, $6,4-11,8 \mu$. Perithecia ascophora non visa.

Hab. in *Junipero procera* (Coniferae), ad Addinifas Sihid in Erythraea, Africa or.

2. *Capnodium Tanakae* Shirai et Hara, ? 1917, Morb. Arbor. fruct. Jap. 4650 p. 239 fig. 31; 3,3,4. — Mycelio late effuso, tomentoso, crasso, folia

fructusque obducente; peritheciis cylindraceis, simplicibus v. ramosis apice globoso-inflatis, membranaceis, 70-100 μ diam., deorsum carbonaceis, atro-brunneis; ascis clavatis v. subfusoides, 8-sporis, 30-45 \times 10-12; sporidiis biseriatis fusoides v. ellipsoideis, 3-septatis, atro-brunneis, 10-15 \times 4-5.

Hab. in foliis fructibusque *Citri aurantiacae* (Rutaceae), in Japonia.

CAPNOPHAEM Spegazzini, *Notas Mycologicas*, « *Physis* » t. IV, 1918, 4651 p. 287. — Subiculum normale; perithecia subglobosa ostiolata, non v. vix umbonata, hispidula v. hirsuta; asci 8-spori; sporae phaeophragmiae. Typus, *C. indicum* (Brn.). — Sacc., l. c., XXII, p. 64.

METACAPNODIUM Spegazzini, *Notas Mycologicas* « *Physis* » t. IV, 4652 1918, p. 288. — Subiculum normale; perithecia subglobosa ostiolata, non v. vix umbonata, glabra; asci 8-spori; sporae phaeophragmiae. — Typ., *M. juniperi* (Phl. et Plwr.). — Sacc., *Syll. Fung.* IX p. 438.

SETELLA Syd., *Ann. Mycol.* 14., 1916, p. 359 (Etym. *seta*), XV, 1917, p. 477. — Perithecia superficialia, globulosa vel conoidea, astoma, submembranacea, atra, mycelio proprio parco vel subnullo, ad apicem setulâ longissimâ praedita, parenchymatice contexta. Asci 4-8-spori, aparaphysati. Sporidia ellipsoideo-oblonga, ex hyalino colorata, pluriseptata.

1. *Setella disseminata* Syd., l. c. — Epiphylla; peritheciis per totam 4653 folii superficiem immutatam aequaliter densissimeque distributis, exiguis, conoideo-globulosis vel late breviterque conoideis, 45-70 μ diam., basi hyphulis brevibus torulosis viridulis vel olivaceis 4-5 μ crassis cinctis, mycelio distincto proprio subnullo, superficialibus, astomis, submembranaceis, parenchymatice e cellulis obscure olivaceis ca. 10 μ diam., contextis, ad apicem setulam singulam (raro setulas duas) gerentibus; setula 250-350 μ longa, basi 7-9 μ lata, apicem versus sensim attenuata, summo apice 3-4 μ lata sed obtusa, obscure brunnea, superne saepe dilutiore, septata (articulis 30-50 μ longis); semper recta, erecta; ascis sessilibus, ovatis vel oblongis, aparaphysatis, 4-8-sporis, 40-65 \times 20-30; sporidiis 2-vel saepius 3-stichis, ellipsoideo-oblongis, rectis vel saepe leniter inaequilateris, 3-septatis, non constrictis, primo hyalinis, in maturitate fuscidulis et subinde ad septum medium leniter constrictis, utrin-

que obtusis, 20-30 \times 9-10, loculis extimis plerumque minoribus.

Hab. in foliis vivis v. languidis *Schizostachyi acutiflori* (Graminaceae), Los Baños ins. Philipp. (S. A. REYES), et *Gigantochloae Scribnerianae*, Los Baños (C. F. BAKER).

PHRAGMOCAPNIAS Theiss. et Syd., Ann. Mycol. 15., 1917, p. 480.—

Est *Limacinia* sporidiis brunneis donata.

1. **Phragmocapnias Betle** (Syd. et Butl.) Theiss. et Syd., Ann. Myc. 4654

15., 1917, p. 480, *Capnodium Betle* Syd. et Butl., Ann. Mycol. IX, 1911, p. 384. — Amphigenum, late effusum, atrum, crustaceo-pelluculosum; mycelio fusco, dense intricato-ramoso, ex articulis cylindraceis leniter constrictis 3,5-6 μ cr. formato; conidiis Cladosporio similibus; pycnidii erectis, usque ad 350 μ altis, cylindraceis, simplicibus parte media 15-25 μ cr., parte inferiore expansis, apice dilutioribus late ellipticis et 50 μ cr., poro pertusis; pycnidiosporis hyalinis, oblongis, continuis, dein plerumque 1-guttulatis septatisve, 4-10 \times 2-4; peritheciis subhemisphaericis, atris, ostiolatis, 100-135 \times 90-110; ascis clavatis, pedicellatis, plerumque 6-sporis; sporidiis fusoides, 4-6-septatis, diu hyalinis, dein fuscis, 20-25 \times 3-5.

Hab. in foliis *Piperis Betle* (Piperaceae), Dacca (A. L. SOM), Muden, Amherst District Burma, Indiae orient. (E. J. BUTLER).

Sect. 5. Hyalodictyae

PHAEOSACCARDINULA P. Henn. 1905, Syll. XVII p. 873, XXII p. 553.

Syn. sec. Theissen et Sydow (Ann. Mycol. 15., 1917, p. 480); *Limacinula* (Sacc. Syll. XVII p. 558, XXII p. 63); *Phaeopeltis* Clements, Genera of Fungi 1909 p. 52; *Tephrosticta* Syd., Ann. Mycol. 1904 p. 162 (ut Subgen.), Syll. XVII p. 745, Philipp. Journ. of Sci., C. Bot., VIII, 1913, p. 271; *Capnites* Theissen, Verh. zool.-bot. Ges. Wien, 1916, p. 353. — Typus gen. *Phaeosaccardinula diospyricola* P. Henn.

1. **Phaeosaccardinula Malloti** (Rehm) Theissen, in Theissen et Sydow, 4655

l. c. p. 481, *Limacinula Malloti* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 395. — Mycelio tabacino-fusco, totam superiorem foliorum paginam obducente, faciliter secedente, membranaceo, cellulis fuscidulis 10-14 \times 6-7 arcte seriatis contexto, glabro; peritheciis plus minusve gregariis, membranaceis, globulosis, glabris, atris, poro minutissimo pertusis, 200 μ diam., siccis

apice collabentibus; ascis ovatis, $50 \times 20-25$, aparthysatis, octosporis; sporidiis distichis, oblongis, utrinque obtusis, transverse 3-5-, longitudinaliter 1 septatis, hyalinis, $20-24 \times 10-12$.

Hab. in foliis *Malloti philippinensis* (Euphorbiaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — *L. javanicae* Zimm. proxima; differt tantum sporidiis minoribus.

2. *Phaeosaccardinula Butleri* (Sydow) Theiss. et Sydow, l. c. p. 451, 4656

Limacinula Butleri Sydow in Syd. et Butl., Ann. Mycol. IX, 1911, p. 385. — Mycelio atro, late effuso, crustaceo-membranaceo, paginam foliorum superiorem saepe omnino tegente, ex hyphis fuscis septatis, aliis repentibus $5-7 \mu$ cr. et setis atris simplicibus acutis usque ad 180μ long. inferne $8-9 \mu$ cr. praeditis, aliis majoribus longiusculis plus minus erectis simplicibus vel parce ramosis usque 13μ cr. ad septa plus minusve constrictis composito; conidiis (e genere Triposporio) 3-4-radiatis, radiis singulis 4-6-locularibus superne attenuatis usque 70μ long., basi usque 15μ latis; pycnidiiis erectis, dimorphis, aliis $150-250 \mu$ alt. circa $18-24 \mu$ cr., cylindraceis, aliis brevioribus sed latioribus ad basim usque 55μ latis superne attenuatis; pycnidiosporis hyalinis, continuis, $3-3,5 \times 1-1,5$; peritheciis ovato-globosis, dein depressis, in sicco collabescentibus, poro minuto pertusis, $150-200 \mu$ diam.; ascis ovatis, clavatis v. cylindraceo-clavatis, $60-85 \times 25-32$, octosporis; sporidiis oblongis v. ellipticis, saepe leniter inaequilateris, hyalinis v. subhyalinis, utrinque rotundatis, transverse 3-6 septatis, longitudinaliter 2-3-septatis, $24-32 \times 10-11$.

Hab. in foliis *Artocarpı mysorensis* (Moraceae), Vayitri, Wynaad, Indiae or. (E. J. BUTLER).

3. *Phaeosaccardinula Theae* (Sydow) Theiss. et Butl., l. c. p. 481, *Li-* 4657

macinula Theae Syd. et Butl., Ann. Mycol. IX, 1911, p. 386, fig. 6. — Mycelio atro, effuso, crustaceo-membranaceo, paginam foliorum superiorem plerumque omnino tegente, ex hyphis fuscis septatis, aliis repentibus ca. 5μ cr. et setis atris simplicibus acutis usque ad 130μ long. inferne 8μ cr. praeditis, aliis majoribus erectis ramosis ad 10μ cr.; conidiis (e genere Triposporio) stellatim 4-radiatis; pycnidiiis erectis dimorphis, aliis usque ad 300μ altis cylindraceis medio inflatis ibique usque ad 22μ cr. superne attenuatis, aliis late cylindraceis c. 80μ altis et 30μ latis; pycnidiosporis cylindraceis, rectis, hyalinis, continuis $2,5-3 \times 1,5$; peritheciis asceigeris superficialibus, globosis, dein depressis, poro pertusis, $150-225 \mu$ diam.; ascis subsessilibus, ovoideis, octosporis; sporidiis oblongis,

utrinque rotundatis, hyalinis, murali divis, transverse plerumque 5-septatis, septo uno longitudinali percursis, 25-33 \times 9-11.

Hab. in foliis ramulisque *Camelliae Theae* (Theaceae), Rungmook, Darjeeling, Indiae or. (G. WATT). — *Lim. javanicae* (Zimm.) v. Höhn. proxima.

LIMACINULA Sacc. — Syll. XVII p. 558, XXII p. 63.

1. *Limacinula caucasica* Woronichin, Les fumagines du Département 4658 de Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 793, tab. 134, fig. 4., tab. 136 fig. 972-975. — Mycelio tenui inter hyphas *Zukaliae caucasicae* intricato, ex cellulis dilute-brunneis praecipue ovalibus, rarius cylindraceis, 7-10 \times 3-4 constructo; hyphis ramosis, praecipue rectangulariter, saepe crustas parenchymaticas formantibus; peritheciis globosis parenchymaticis, membranaceis, leviter compressis, statu sicco fere patelliformibus, ostiolatis, 220-230 μ diam.; ascis oblongo-ovoideis, aparaphysatis, 45-75 \times 18-30; sporis fusoides, rectis vel curvatis, 30-45 \times 5-7(-9) apiculatis, septis 8-11 transversis vel obliquis, et longitudinale, 1-3 loculos dividente, instructis, pycnidiis elongatis, rectis, supra medium inflatis ibique 30-35 μ crassis, apicibus fimbriatis, 540-650 μ longis, 25-35 μ crassis.
Hab. in foliis vivis *Taxi baccatae* L. (Coniferae), soc. *Zukaliae caucasicae* Woronichin., Caucasus gub. Tshernomorskaja, pr. Chosta, (N. WORONICHIN).

2. *Limacinula Salicis* (Arn.) Sacc. et Trotter, *Teichospora Salicis* Arnaud, 4659 Ann. École Nat. Agric. Montpell. X, 1911, p. 325 et icon. p. 266. — Peritheciis ramicolis, minutis, 200 μ diam., globosis, sparsis, superficialibus depresso ostiolatis, nigro-nitidis, subiculo fumagineo insidentibus; ascis clavato-cylindraceis, aparaphysatis, 8-sporis; sporidiis ellipsoideo-fusoides, fusciculis, non constrictis, utrinque breviter mucronatis, transverse 5-septatis, 25-30 \times 8-10, loculis pluribus longitrorsum 1-septatis.

Hab. ad ramos *Salicis cinereae* (Salicaceae), prope Montpellier, Galliae merid. — Ob subiculum ex icone vere fumagineo potius *Limacinulae* species.

3. *Limacinula cupularis* Patouillard, Bull. Soc. Mycol. de Fr., XXXIV, 4660 1918, p. 89. — Mycelio brunneo-nigro, crustam membranaceam tenuem separabilem totum folium obtegentem efformante; hyphis brunneis, cylindraceis, septatis ramosis 5-8 μ cr., hinc inde moniliformibus, ex articulis ellipsoideis 15-20 \times 8-10 efformatis, levibus; pycnidiis non visis; peritheciis sessilibus superficialibus globosis

dein depresso cupulatis, levibus, 250-300 μ diam., coriaceis, nigris, e cellulis angulosis brunneis circ. 6-12 μ cr. efformatis; ostiolo centrali rotundato, circa 50 μ cr., filis evanidis incoloribus radiantibus circumdato; ascis breviter stipitatis ovoideo-clavatis, aparaphysatis, inordinate 6-8 sporis, circ. 75 \times 33; sporidiis oblongis, utrinque rotundatis diu incoloribus et hyalinis, demum rubro-olivaceis, ad septa vix constrictis, 42-60 \times 16-20, 8-15 transverse septatis, septis verticalibus 3-4 praeditis.

Hab. in foliis arboris cujusdam ignoti, in Ins. Madagascar (VIGUIER). — Potius *Phaeosaccardinula*.

Sect. 6. Phaeodictyae

COCCODINIUM Massal., Atti Ist. Ven. Sc., Lettere ed Arti, Ser. III, 4661 v. 5., Venezia 1860, p. 336. — Syn. *Naetrocymbe* Körb. 1865, Syll. XXII p. 67. — Verisimiliter nomen körberianum antierius (Lich. sel. germ. 1858, n. 58) et tunc servandum.

Sect. 7. Scolecosporae

PSEUDOMELIOLA Speg. — Syll. IX p. 938, XI p. 269, XVI p. 1127, XXII p. 57.

1. **Pseudomeliola placida** Syd., Leaf. Philipp. Bot., IV, 1911, art. 62, 4662 p. 1154. — Peritheciis hypophyllis, maculas minutas, 1-2 mm. diam., fuscas formantibus, mycelio parco ex hyphis fuscis irregulariter ramosis 6-10 μ crassis composito insidentibus, glomerulatis superficialibus, ovatis vel ovato-elongatis, 250-300 μ altis, 150-200 μ latis, subcarbonaceis, distincte papillatis, obscure brunneis; ascis cylindraceis, breviter pedicellatis, 70-130 μ longis, 7-10 μ latis, cotosporis; sporidiis filiformibus, pluries guttulatatis, 60-100 μ longis, 1,5-2,5 μ crassis, hyalinis, saepe leniter curvulis; paraphysibus numerosis, hyalinis, filiformibus, ca. 1 μ crassis.

Hab. in foliis vivis *Semecarp*i *Perrotteti* (Anacardiaceae), Todaya, Ms. Apo, Distr. Davos, ins. Mindanao, in Philipp. (ELMER).

OPHIOCAPNODIUM Spegazzini, Notas Mycologicas « Physis », t. IV, 4663 1918, p. 286. — Subiculum normale; perithecia subglobosa, ostiolo, cylindraceo praelongo praedita; asci 8-spori; sporae lineares pluriseptatae olivaceae. — Typus *O. Usterii* (Speg.) Speg. — Sacc., l. c., XXII, p. 57.

ACTINOCYMBE v. Höhn., *Fragm. z. Mykol.* n. 690 (1911). — Theissen 466 et Sydow, *Ann. Mycol.* 15., 1917, p. 478. — *Mycelium dematiaceum membranaceum, setulosum. Perithecia insidentia, arescendo depressa, distincte ostiolata, polyasca. Sporidia elongato-cylindracea, subfiliformia, hyalina pluriseptata.* — Typus sistit *Actinocymbe separatosetosa* (P. Henn.) v. Höhn. (*Actiniopsis* P. Henn., *Syll.* XXII p. 531). — Cl. v. HÖHNEL cum hoc gen. et compluribus affinibus (sed sporologice dissimilibus) gregem novum condidit:

NAETROCYMBRAE v. Höhn. 1909, *Fragm. z. Mykol.* VIII, n. 379 in *Sitzb. k. Ak. d. Wiss. Wien, math.-naturw. Kl., Bd. 118, Abt. I*, p. 1200.

A. Setosae

- | | |
|---------------------------------------|------------------------------|
| 1. Sporidia bilocularia | <i>CHAETOTHYRINA</i> Theiss. |
| 2. » quadrilocularia | <i>CHAETOTHYRIUM</i> Speg. |
| 3. Sporidia transverse multilocularia | <i>ZUKALIA</i> Sacc. |
| 4. » » » | <i>ACTINOCYMBE</i> P. Henn. |
| 5. » muralia | <i>TREUBIOMYCES</i> v. H. |

B. Non setosae

- | | |
|---------------------------------------|-----------------------------------|
| 6. Sporidia transverse multilocularia | <i>XYSTOZUKALIA</i> Theiss. |
| 7. » muralia | <i>PHAEOSACCARDINULA</i> P. Henn. |
| 8. » » | <i>NAETROCYMBE</i> Körb. |

Syn. *CHAETOTHYRIKAE* Theissen, *Ann. Mycol.* 11., 1913, p. 496.

- | | |
|--------------------------------------|--|
| I. Sporidia hyalina unilocularia | <i>CHAETOTHYRINA</i> Theiss. |
| II. Sporidia hyalina quadrilocularia | <i>CHAETOTHYRIUM</i> Speg.
(Syn. <i>Malmeomyces</i> Starb.) |
| III. Sporidia hyalina muralia | <i>TREUBIOMYCES</i> v. Höhn. |

Subfam. 6. Parodiellinae Arnaud,

Ann. d. Épiphyties, t. VII, 1919-1920 (1921), p. 4.

I. Mycelium externum nullum

- | | |
|--|-------------------------------------|
| 1. Stroma pluriloculare: Trib. | Bagnisiopsidae Arn. |
| Gen. unicum | <i>BAGNISIOPSIS</i> Th. et Syd. |
| 2. Stroma uniloculare: Trib. | Parodiellinae Arn. |
| a) Perithecia stromate late adnata;
sporidia unilocularia | <i>PARODIELLINA</i> (P. Henn.) Arn. |
| b) Perithecia pedicello tenni stromate pulvinato connexa; sporidia bilocularia | <i>CHEVALIERIA</i> Arnaud |

II. Mycelium externum præsens plerumque copiosum

1. Perithecia appendicibus destituta,
mycelio colorato quandoque se-
taloso, mycelio interno evoluto
(sp. phaeodidymæ v. phaeoph-
ragmiae): Trib.

Parodiopsisidæ Arn.

a) Phaeodidymæ

PARODIOPSIS Maubl.

b) Phaeophragmiae

PERISPORINA P. Henn.

c) Scolecosporæ v. subscolecosporæ

NEMATOTHECIUM Syd.

BAGNISIOPSIS Th. et Syd., Ann. Mycol. XIII, 1915, p. 291 (in Dothideaceis). — Stroma pulvinatum, erumpens, dothideoideum, loculis immersis (v. vertice subliberis). Asci paraphysati, octospori. Sporidia hyalina simplicia.

1. **Bagnisiopsis rhoïna** (Syd. et Hara) Theiss. et Sydow, Ann. Mycol. 4665
XIII, 1915, p. 293, *Bagnisiella rhoïna* Syd. et Hara, l. c. X, 1912, p. 408. — Stromatibus erumpentibus, peridermii laciniis arcute cinctis, irregulariter distributis, globulosis vel ellipticis, 0,5-1 mm. longis, atris, superficie ob loculos prominulos rugosis; loculis 4-10 in quoque stromate, globulosis, 140-200 μ diam.; ascis clavatis, apice rotundatis ac crasse tunicatis, 85-105 \times 17-19, octosporis, brevissime stipitatis, filiformiter paraphysatis; sporidiis oblongis, uno fine saepe latioribus, continuis, hyalinis, minute guttulatis, utrinque rotundatis, 20-24 \times 6-10, rectis, distichis.

Hab. in ramis *Rhoïsilvestris* (Anacardiaceae), vr. Mino, Kawaue-mura, Japonia (K. HARA).

2. **Bagnisiopsis Dioscoreae** Wakefield, Bull. Misc. Inf. Kew, 1918, p. 4666
201 cum icon. — Stromatibus erumpentibus sublineari-elongatis, pulvinatis superficie ob loculos prominulos rugosis, atris, 1 mm. diametro, contextu pseudoparenchymatico. Loculis numerosis globosis ad 500 μ diametro. Ascis cylindræis, apice rotundatis, brevissime stipitatis, octosporis, 120-135 \times 12-15. Paraphysibus filiformibus, 2,5-3 μ diam. ascos aequantibus. Sporidiis monostichis, oblongis, utrinque obtusis, hyalinis, interdum polari-guttulatis, 17-18 \times 7-8,5.

Hab. in caulibus petiolisque *Dioscoreae* *prehensilis* (Dioscoreaceae), Okigwi in Nigeria infer., Africa trop. (C. O. FARQUHARSON, TALBOT et OBAN).

3. **Bagnisiopsis tijucensis** Theiss. et Syd., l. c. — Hypophylla. Stromate 4667
nigro opaco rotundato usque 0,8 mm. diam., 0,4-0,45 mm. alto de-
presse pulvinato v. noduloso macula colore vinosa limitato et epi-

dermide rupta cincto; superficie muriculata; contextu rubro-brunneo subprosenchymatico; loculis immersis 250-350 μ diam., parietibus propriis nullis, superficialiter ore periphysibus circumdato apertis; ascis paraphysatis, p. sp. 85-100 \times 9-12; sporidiis monostichis, hyalinis (coacervatis leniter flavescentibus), 13-16 \times 6-8, elipsoideis, continuis.

Hab. in foliis *Tibouchinae* v. *Leandrae* sp. (Melastomataceae), Serra do Itatiaia R. de Janeiro, Brasilia (DUSÉN).

CHEVALIERIA G. Arnaud, C. R. Ac. Sc. Paris t. 170, 1920, p. 203 4668 (Ety. e CHEVALIER qui fungus collegit). — Perithecia in stromate emergenti disposita; asci aparaphysati; sporidia bilocularia.

Huic pertinet *Dimerosporium ctenotrichum* Har. et Pat. et tunc *Chevaliera ctenotricha* (Har. et Pat.) Arnaud vocandum.

PARODIOPSIS Maublanc in Arnaud., Not. Mycol. 1915, p. 22, Aste rinées I, 1918, p. 21, Ann. Serv. Epiphyt. I, 7., 1919-1920, p. 56. — A gen. *Parodiella* et *Parodiellina* mycelio externo praesenti diversum. Sporidia bilocularia. — Sec. Arnaud, l. c. (1919-1920) p. 57, ad gen. *Parodiopsis* Maubl. spectant etiam: *Ohrysomyces* Th. et Syd., *Schistodes* Th., *Hypoplegma* Th. et Syd., *Perisporiopsis* P. Henn., *Piline* Th.

1. *Parodiopsis melioides* (Wint.) Arnaud, Ann. Service Epiphyt. t. 7., 4669 (1919-1920), p. 58, tab. V. — Syn. *Parodiella consimilis* P. Henn. Cl. Arnaud (l. c.) in hac species diffusa formas novas sequentes distinguit.

a) typ. in Myrtaceis.

b) *Monimiaceae*, Brasilia in Monimiaceis.

c) *Olusiaceae*, Equatoria in Olusiaceis, status coud. tantum notum est *Exosporina Olusiaceae* Arn.

d) *Luheae*, Brasilia, in Tiliaceis (*Luhea*).

e) *Meliaceae*, America austr., in Meliaceis (*Cabralea*).

f) *Anacardii*, America austr., in Anacardiaceis (*Anacardium*, *Tapiria* etc.).

g) *Erythroxyli*, Brasilia, in Erythroxylaceis (*Erythroxylon pulchrum*).

h) *Erythrinae*, Brasilia, in Papilionaceis (*Erythrina*).

i) *Cordiae*, America austr., in Cordiaceis (*Cordia*).

2. *Parodiopsis Perae* Arnaud, Ann. Service Epiphyt. t. 7. (1919-1920), 4670 p. 57, 59 fig. 5-6, tab. IV. — Mycelio valido, brunneo-rubescenti, se-

tulis myceliis simplicibus praedito, haustoriis convolutis majusculis; peritheciis coriaceo-carnosis, infra stromaticis, parietibus crassiusculis donatis, obscure latericiis v. subcinnabarinis, 230 μ diam., ostiolo parum definito; ascis clavatis e disco sterili exurgentibus, paraphysatis; sporidiis immaturis hyalinis, bilocularibus, 36×12 , demum brunneis.

Hab. in Euphorbiaceis plurimis: *Pera Leandrum*, Brasilia et Peru, *Alchornea Iricurana*, America austr., *Hevea* sp., Brasilia, *Manihot* sp., Peru, et in Euphorbiaceis indet. ex Africa trop., America austr.; forma conidica in *Sapio abvssinico* (*Exosporium lateritium* Syd.), Amani, Africa or.

NEMATOTHECIUM Syd. in Leaflets of Philipp. Bot. V (1912) p. 1534.—

(*Etym.* *nema*, filum vel hypha et *theca* pro perithecio, ob contextum perithecorum hyphosum). — Perithecia in subiculo copiose evoluto superficialiter insidentia, globulosa, astoma, irregulariter dehiscentia, molliuscula, fusco-brunnea, contextu haud parenchymatico sed ex hyphis formato. Asci cylindracei, octospori, copiose paraphysati. Sporidia elongata, subfiliformia, pluriseptata, colorata.

1. **Nematothecium vinosum** Syd., loc. cit. — Plagulas hypophyllas rotundatas vel irregulares vinosas 0,5-2 cm. latas efformans, in mycelio *Meliolae* parasitans; mycelio repente, hyphas *Meliolae* dense ambiente, ex hyphis densissime intertextis et connatis anastomosantibus, rete densum formantibus, primo subhyalinis dein fuscis, tenuibus, 1,5-2 μ tantum crassis vel usque ad 3-4 μ , saepe projectiones breves valde irregulares plerumque incisas vel acute lobatas gerentibus composito; peritheciis numerosis in quaque plagula, laxe dispositis vel subinde aggregatis, globosis vel globoso-depressis, 200-300 μ diam., molliusculis, brunneis vel vinoso-brunneis, astomis, irregulariter dehiscentibus, ambitu hyphis mycelii cinctis, contextu ex hyphis densissime intertextis et connatis composito; ascis fasciculatis, cylindraceis, apice rotundatis, haud incrassatis, rectis vel curvulis, subsessilibus, 65-90 \times 10-14, octosporis, paraphysibus copiosis, ascos aequantibus vel superantibus, superne varie curvis ramosisque hyalinis, 1,5-1,75 μ cr.; sporidiis parallele positis, subfiliformibus vel filiformi-fusoides, plerumque sigmoideo-curvatis, utrinque attenuato-acutiusculis, primo multiguttulatis dein 6-10-septatis, olivaceo-brunneis, 60-75 \times 3-4.

Hab. parasiticum in mycelio *Meliolae* ad folia *Eugeniae incarnatae*, Puerto Princessa, Palawan, ins. Philipp. — Fun-

gus valde curiosus, inter Perisporiaceas locandus, Aspergillaceis quoque affinis.

Fam. 2. Microthyriaceae SACC.

Cum Microthyriaceis sensu ampliore, convenit novum Ordo **Hemisphaeriales** Theissen (Ann. Myc. 1913 p. 468; Mycol. Centralbl. III, 1913, p. 273-286, 4 icon. 1 tab.), cuius characteres et dispositio synoptica sec. Theissen et Sydow (Ann. Mycol. 15., 1917, p. 396) haec est *):

Perithecia v. ascomata dimidiato-scutata, libera v. basi hypostromate
in epidermide radicata

A. Scutellum radiatim constructum

a) Mycelium filiforme v. nullum

I. Perithecia adnata

1. Perithecia subcuticularia

Stigmataceae

2. Perithecia superficialia, hypostromate adnata

Polystomellaceae

II. Perithecia et mycelium superficialia libera

Microthyriaceae

b) Mycelium radiante membranaceum

Trichopeltaceae

B. Scutellum non radiatim constructum

Hemisphaeriaceae

Subfam. 1. Stigmataeæ

Conspectus Generum Stigmataearum secundum THEISSEN, et THEISSEN et SYDOW:

Fam. 1. Stigmataeæ

Ann. Mycol. 14., 1916, p. 426; Theiss. et Sydow, Ann. Myc. 15., 1917, p. 399.

A. Ascomata disco ascigero basi praedita EUSTIGMATAE Th. et Syd.

I. Scutellum distincte radiatum

a) Mycelium praesens liberum; sporidia muralia

VIZELLA Sacc.

b) Mycelium nullum

1. Sporidia brunnea continua

ENTOPELTIS v. H.

2. Sporidia hyalina didyma; ascomata elongata

LEPTOPELTIS v. H.

3. Sporidia brunnea didyma

STIGMATEA Fr.

= HORINOTHECA Bon.

4. Sporidia hyalophragmia

STIGMATODOTHIS Syd.

II. Scutellum fere totum pseudoparenchymaticum; mycelium nullum; sporidia brunnea didyma

*) Cnfr. etiam: ARNAUD in C. R. Ac. Sc. Paris, t. 159, 1914, p. 807, t. 164., 1917, p. 574 et p. 888.

- a) Ascomata setulosa; paraphyses praesentes
 b) Ascomata nuda; paraphyses nullae

COLEROA Rabh.

APHYSA Th. et Syd.

- B. Ascomata discis ascigeris plurimis praedita; scutellum contextu distincte radiante praeditum; mycelium nullum

MUNKIELLEAE Th. et Syd.

1. Sporidia hyalina unilocularia

COSCINOPELTIS Speg.

2. Sporidia hyalina bilocularia

- a) loculi aequales

ISOMUNKIA Th. et Syd.

- β) loculo inferiore papilliformi

MUNKIELLA Speg.

3. Sporidia phaeophragma

MELANOCHLAMYS Speg.

Genera dubia:

- I. Disci ascigeri annulati innati; sporidia brunnea unilocularia; paraphyses praesentes

BLASDALEA Sacc. et Syd.

- II. Disci ascigeri lineares irregulariter distributi; paraphyses praesentes

- a) Fructificatio demum libera; sporidia bilocularia brunnea

AULACOSTROMA Syd.

- b) Fructificatio diu cuticula tecta; sporidia bilocularia brunnea

PSEUDOLEMBOSIA Theiss.

Sect. 1. Hyalosporae

COSCINOPELTIS Speg. — Syll. XXII p. 515. — Theiss. et Syd., Ann. 4672
 Mycol. XIII, 1915, p. 260; XV, 1917, p. 402. — Huc spectat etiam
 sec. Theiss. et Syd.: *Phyllachora tenuis* Speg. et *Ph. tenuissima* Sacc.
 et Syd., Syll. IX p. 1009, XIV p. 673.

Sect. 2. Phaeosporae

ENTOPELTIS v. Höhnelt, Fragm. z. Mykol. X, 1910, n. 489. — Theiss. 4673
 et Syd., Ann. Mycol. XV, 1917, p. 401. — Ascomata subcuticularia,
 scutata, alata, contextu hyphenchymatico radiante tenui praedita,
 hyphis e margine prominentibus. Sporidia unilocularia brunnea;
 caeterum ut in *Vizella*. — Typ. gen. *Ent. interrupta* (Wint.) v.
 Höhn., l. c.

Sect. 3. Hyalodidymae

LETOPELTIS v. Höhnelt, Ber. deutsch. bot. Ges. XXXV, 1917, p. 358. — 4674
 Subcuticularis. — Typus gen. *Lept. flicina* (Mont., ut *Gloniella*) v.
 Höhn. — In *Pteride*.

MUNKIELLA Speg. — Syll. IX p. 1034, XVI p. 625, XXII p. 434. —

Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 262; XV, 1917, p. 402.

1. **Munkiella Shiraiana** Miyake et Hara, Stud. üb. die Pilze der Bambusse (jap.) in litt. VI, 1912. Status conidiophorus: *Melanconium Shiraianum* Syd. — Syll. XIV p. 1009. — Peritheciis uniseriatis (st. conidioph. intermixtis), stromate immersis et cum eo continuis, globosis v. leniter depressis, 140-190 μ diam., ostiolis erumpentibus; ascis cylindricis, apice rotundatis deorsum leviter tenuatis, 85-95 \times 18-24, octosporis; sporidiis distichis, raro monostichis, ellipsoideis v. ovoideis, saepe curvulis, bilocularibus, loculis valde inaequalibus, non constrictis, 25-35 \times 8,5-12, hyalinis, prima aetate strato mucoso obductis; paraphysibus filiformibus, 5 μ cr., asco paullo longioribus.

Hab. in culmis emortuis *Phyllostachydis bambusoidis*, Komaba Tokyo, Japonia. — Germinatio in stat. conid. et asceph. observata.

ISOMUNKIA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 261; XV, 1917, 4676

p. 402. — A gen. *Ooscinopeltis* differt sporidiis hyalodidymis. — Typ. gen. *Is. pulvinula* (Pat., ut *Dothidella*) Th. et Syd., l. c.

Sect. 4. **Phaeodidymæ**

STIGMATEA Fr. — Syll. I p. 541, IX p. 660, XIV p. 534, XVI p. 478,

XVII p. 649, XXII p. 148.

1. **Stigmatæa Pelvetiæ** Sutherland, New Phytologist, XIV (1915), 4677 nn. 2-3, p. 37 fig. II, 1-6. — Peritheciis subconcentricis in maculis nigricantibus dispositis, immersis, prominentiis hemisphaericis efformantibus ostiolo tantum punctiformi erumpentibus, 160-200 μ cr.; contextu apicem versus tantum evoluti; ascis cylindræis, longis, apice incrassatis, 100-120 \times 12-14, 8-sporis; paraphysibus praesentibus, simplicibus v. ramosis, septatis; sporis ovoideis, 22-25 \times 9-12, hyalinis, uniseptatis, distincte constrictis; pyrenidiis minoribus, pyriformibus, tunica crassa nigra praeditis, 70 \times 85 μ cr., primum immersis dein superficialibus; sporulis 3 \times 1,5 (? *Phyllosticta*).

Hab. parasitice in thallo *Pelvetiæ* (ex *Algis*), ad litora Scotiæ.

2. **Stigmatæa bullata** Syd., Leaf. Philipp. Bot., IV, 1911, Art. 62, p. 4678

1154. — Maculis orbicularibus in hypophyllo ochraceis obscurius marginatis, 2-4 mm. diam., leniter bullatis; peritheciis epiphyllis,

totam maculam occupantibus, densissime aggregatis, globosis, atris, 70-100 μ diam., pariete 18-20 μ crasso, apice tantum prominulis, pertusis; ascis clavatis, apice rotundatis, breviter pedicellatis, 45-70 μ longis, 14-18 μ latis, octosporis; sporidiis distichis utrinque obtusis, medio 1-septatis, non constrictis, hyalinis, 18-22 μ longis, 5-7 μ latis; paraphysibus ascos aequantibus filiformibus 1 μ cr.

Hab. in foliis vivis *Schefflerae mindanaensis* (Araliaceae), Todaya, Ms. Apo, Distr. Davao, ins. Mindanao in Philipp. (ELMER).

3. **Stigmatae Cephalariae** Ranojevic, Ann. Mycol. XII, 1914, p. 396. — 4679

Maculis primum brunneo-violaceis, dein albedo-griseis plerumque violaceo-marginatis, rotundatis, usque 2 mm. latis, saepe confluentibus; peritheciis epiphyllis, gregariis, nigris, subepidermicis, ostiolo minuto perforantibus, globosis, elongatis, contextu cellulis brunneis usque ad 142 μ latis efformato; ascis cylindraceutis, supra rotundatis, reetis, curvatis, 50-62 \times 9-13; sporidiis infra subdistichis supra monostichis, elongato-clavatis, bilocularibus, loculo inferiori minori, septo saepe constrictis, 11-15 \times 4-7,5, pallide brunneo-fuliginis, paraphysibus filiformibus, septatis, supra 1-2 dichotome ramosis, apice incrassatis, ascis aequilongis v. parum superantibus.

Hab. in foliis caulibusque vivis *Cephalariae transylvanicae* (Dipsacaceae), Weinbergen Gorica prope Nisc, Serbia.

4. **Stigmatae philippinensis** H. S. Yates, Philipp. Journ. Sc. XII (1917) 4680

p. 376. — Maculis albo-griseis, orbicularibus vel elongatis, 5 mm. diam. vel usque ad 3 cm. longis et 1 cm. latis; peritheciis immersis, ostioliis numerosis, epiphyllis, hemisphaericis, 75-100 μ diam.; ostioliis orbicularibus; ascis elongatis, 26-30 \times 10, octosporis; sporidiis oblongo-ellipsoideis, medio 1-septatis, levibus, 12-13 \times 3-4.

Hab. in foliis *Homalii* (Flacourtiaceae), Basiad, Tayabos, Luzon, Ins. Philipp.

5. **Stigmatae cinereo-maculans** Rehm, Ascomyc. Philipp. II, in Phil. 4681

lipp. Journ. of Sci. VIII (1913) p. 257. — Peritheciis maculis epiphyllis dilute cinereis, rarissime atro-marginatis, orbicularibus, 0,5-1 mm. latis, mox in latas plagas confluentibus innatis, primitus singulis, lenticularibus, hemiglobose prominentibus, atris, poro pertusis, glabris, 200 μ latis, membranaceis, parenchymatice fuscidule contextis; ascis cylindraceutis, 25 \times 3-3,5, plerumque tetrasporis paraphysibus haud conspicuis; sporidiis monostichis, ellipsoideis, utrinque rotundatis, medio septatis, non constrictis, utraque parte 2-guttulata, hyalinis, 6-7 \times 2.

Hab. in vaginis foliorum *Pandani* (Pandaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — *St. Pandani* Pat. sporidiis et ascis omnino diversa.

6. *Stigmatæa Pirolae* (Fr.) Schröt., Die Pilze Schles., II p. 332 (1908) 4682
Lind. Dan. Fung. p. 201 t. IV p. 49-50. — Ita vocanda *Sphaeria* (Depazea) *Pirolae* Fr. — Sacc. Syll. III p. 64, seu *Sphaerella chimophilina* Peck. — Syll. XI p. 297. — Perithecia 120-150 μ diam.; asci clavati apice rotundati, subsessiles, fasciculati, aparaphysati, 40-56 \times 8; sporidia octona, inaequaliter 1-septata, hyalina, 12-14 \times 4.

Hab. in foliis *Pirolae* (Pirolaceae), in Germania, Dania, Amer. bor. — Ob sporidia hyalodidyma potius *Isomunkia*.

7. *Stigmatæa moravica* Petrak, Flor. Boh. et Mor. exs. II Ser. 1. Pilze 4683
n. 172 (sub *Stigmatæa seriata* Wint.); Ann. Mycol. XII, 1914, p. 473. — Peritheciis gregariis, minutissimis, epidermide tectis, ambitu circularibus v. ovatis, 70-100 μ diam., poro minutissimo pertusis, contextu membranaceo pseudoparenchymatico, brunneo; ascis fusoides, utrinque paullatim angustatis medio latissimis sessilibus, 50-60 \times 4-7, aparaphysatis; sporidiis distichis v. submonostichis, rectis v. plus minusve curvulis, anguste fusoides utrinque attenuatis, medio uniseptatis, ad septum non constrictis, eguttulatis, 10-18 \times 1,5-2,5.

Hab. in ramulis emortuis *Rosae caninae* (Rosaceae), prope Hraburka, Mähr. Weisskirchen, Moraviae or.

8. *Stigmatæa Tonduzi* Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. 4684
Cienc. Cordoba, t. 23., 1919, Extr. p. 194. — Maculae epiphyllae sub-orbiculares, subdeterminatae, rufescentes; perithecia epiphylla centro macularum laxe gregaria, innato-erumpentia, pusilla, 75-100 μ diam., fusca sublenticularia umbonatulato-ostiolata, glabra; asci subclavulati, antice obtusissime rotundati, postice sensim attenuati, pedicello brevi crassiusculo fulti, aparaphysati, octospori, 45-55 \times 8-10; sporae angustae subcylindraceae, utrinque obtusae medio 1-septato-constrictulae, laeves, hyalinae, 14-15 \times 3,5-4.

Hab. in foliis vivis *Rubi (urticifolii)* (Rosaceae), prope Carthago Costarica, America trop.

9. *Stigmatæa Guettardae* L. R. Tehon, Bot. Gazette 67., 1919, p. 508. — 4685
Maculis latis 0,5-3 cm. diam., irregularibus, pallide brunneis v. juventute rubris vetustate cinereis v. albis, quandoque definitis et brunneo marginatis; peritheciis epiphyllis, gregariis, centro macularum dispositis, parvis, nigris, 60-80 μ diam., ostiolo erumpenti 6-10 μ lato praeditis; ascis oblique oblongis, brevibus et abrupte

stipitatis, supra obtusis, octosporis, $25-40 \times 8-10$; sporidiis elongato-ellipsoideis, bilocularibus, constrictulis, loculis subaequalibus, hyalinis, $11-13 \times 2-3$; paraphysibus longis filiformibus septatis, e hyalinis flavescentibus.

Hab. in foliis *Guetardae ovalifoliae* (Rubiaceae), Maricao, Barros, M. Alegrillo, Indiera Fria, G. scabrae, Tanama Riv., Porto Rico, America.

10. *Stigmatæa Cestri* Patouill., Bull. Soc. Mycol. de Fr., 1912, p. 141. — 4686

Maculis epiphyllis, orbicularibus, nigris, 4-8 mm. diam., irregulariter sparsis; peritheciis centro gregariis, globosis, nitentibus, semimmersis, coriaceis, $90-100 \mu$ latis, apice poro pertusis, albonucleatis; ascis claviformibus, obtusis, circ. 100×20 , octosporis, paraphysatis; sporidiis biserialis, hyalinis, continuis, ellipsoideis, intus granulosi, 21×9 .

Hab. in foliis vivis *Cestri* sp. (Solanaceae), prope San José Costa Rica, America Centr. (TONDUZ).

COLEROA Fr. ut sub-gen. — Syll. XXII. p. 153.

1. *Coleroa Aliculariae* Gonz. Frag., Hongos sobre Muscineas, Bol. Soc. 4687

Espan. Hist. Nat. t. XVI, 1916, p. 368. — Peritheciis epiphyllis, plerumque 1-2 superficialibus, globulosis, usque 125μ diam., contextu pseudoparenchymatico, membranaceo, fuligineo, setulis laxè vestitis, setis fuscis usque 38×3 , continuis v. 1-septatis, attenuatis, rectis v. leniter flexuosis, raro curvulis; ascis obpiriformibus usque 45×14 , paraphysatis, subsessilibus, parietibus crassiusculis, apice rotundatis; sporidiis irregulariter distichis, ovoideo-oblongis, subhyalinis, $12-15 \times 6-7$, ad medium uniseptatis, non constrictis, loculis 1-2 crasse guttulatis.

Hab. in foliis vivis *Aliculariae scalaris* (Bryophytae), in montibus Guadarramae loco dicto « La Cebollera », Hispania (BELTRAN). — *Coleroae bryophilae* (Fuck.) proxima.

2. *Coleroa Bubaki* Gonz. Frag., Hongos sobre Muscineas, Bol. Soc. 4688

Espan. de Hist. nat. t. XVI, 1916, p. 367. — Peritheciis 1-5-epiphyllis, superficialibus, globuloso-depressis, $75-175 \mu$ diam., contextu pseudoparenchymatico, membranaceo, fusco, poro minuto pertusis, setulis numerosis vestitis, setis flexuosis, obtusiusculis, septatis, plerumque $25-30 \mu$ long. basi $3-3,5 \mu$ cr.; ascis ellipsoideo-oblongis $36-40 \times 14-15,5$, octosporis, brevissime pedicellatis, apice rotundato-incrassatis, paraphysatis; sporidiis tristichis v. conglobatis, ovoideo-oblongis, subhyalinis, primum continuis, dein 1-septatis, non

constrictis, loculo uno latiore altero attenuato, 1-guttulatis v. granulosis, extremis utrinque rotundatis, $12-15 \times 5-5,5$.

Hab. in foliis vivis v. languidis *Marsupellae emarginatae* (Bryophytae), prope Santiago, Hispania (A. CASARES). — Affinis *Coleroae bryophilae* (Fuck.), sed diversa.

3. *Coleroa Casaresi* Bub. et Frag. in Bub., Hedw. LVII p. 3 (1915). ... 4689

Peritheciis epiphyllis, 1-3, superficialibus, membranaceis, globosis, basi applanatis, $75-100 \mu$ diam., nigris, apice poro rotundo apertis, contextu parenchymatico atro-brunneo, extus setis paucis sparsis, nunc creberrimis, atro-brunneis $20-40 \times 3$, rectis v. curvatis, sursum parum attenuatis, continuis, v. 1-septatis; ascis ovoideo-oblongis, $20-28 \times 7-9$, apice rotundatis et incrassatis, breve pedicellatis, 8-sporis, aparaphysatis; sporidiis 3-4-stichis, oblongis, $7-9 \times 3-3,5$ utrinque rotundato-attenuatis, 1-septatis, loculo sup. interdum latiore.

Hab. in foliis *Scapaniae nemorosae* (Bryophytae), Castro-Loureiro, Pontevedra, Hispania (CASARES). — A *Col. turfosorum* (Mont.) Bubák sphagnicola, distinguenda. — Var. *Frullaniae* Gonz. Fragoso, Mem. R. Soc. Espan. Hist. Nat. t. 11., 1919, 3., p. 108, fig. 1. — Peritheciis subsuperficialibus basi immersis, atris, globosis, usque 120μ diam., contextu pseudoparenchymatico, membranaceo, poro regulariter pertusis, setis rectis vel curvulis, continuis, vel 1-septatis, usque 28μ long., circumdatis; ascis usque 28×9 , ovoideo-oblongis, subsessilibus; sporidiis irregulariter distichis vel tristichis, prope medium 1-septatis, utrinque attenuato-rotundatis, loculis guttulis crassis minutisque praeditis.

Hab. in foliis vivis *Frullaniae Tamarisci* (Bryophytae) cui noxia, Pontevedra, Hispania (Dr. A. CASARES). — Var. *Plagiochilae* Gonz. Frag., l. c. — Peritheciis, 1-5, epi-vel hypophyllis, superficialibus, globosis vel globoso-applanatis, $60-95$ diam., contextu pseudoparenchymatico, membranaceo, atro-brunneo, poro rotundo apertis, setis prope apicem dispersis vel circumdantibus, atro-brunneis, rectis vel vix curvatis, attenuatis, usque $45 \times 3,5-4$, continuis, rarissimis 1-septatis; ascis ovoideo-oblongis, $20-25 \times 7-10$, rarius usque 28×10 , brevi pedicellatis, octosporis, aparaphysatis; sporidiis distichis vel conglobatis, ellipsoideo-oblongis, $10-11,5 \times 3,2-3,5$, utrinque rotundatis, 1-septatis, rarius loculis 1-guttulatis.

Hab. in foliis *Plagiochilae asplenioidis* (Bryophytae), in silvis Saleur, Germania (O. KECK).

4. *Coleroa inconspicua* Bubák, III Beitr. Pilz. Montenegro, in Bot. 4690
 nikai Közlemények, 1915, p. (54). — Peritheciis in rimis fissurisque
 caulium et ramorum, superficialibus, facile secedentibus, basi hyphis
 simplicibus vel funiculato-contextis brunneis vel hyalinis, torulosis,
 repentibus instructis, globosis, basi applanatis, supra subconicis,
 ostiolatis, 40-80 μ in diam., castaneo-brunneis, contextu pseudopa-
 renchymatico, tenui, melleo, setis rigidis, rectis, usque 50 μ longis,
 4 μ latis, sursum sensim attenuatis, apice acutatis vel rotundatis,
 brunneis, continuis vel 1-2 septatis, paucis vel pluribus supra or-
 natis; ascis oblongis vel oblongo-cylindricis, 38-60 \times 9-13, apice ro-
 tundatis, basi breve pedicellatis, paraphysibus ephemeris, tenuibus
 obvallatis, octosporis; sporidiis oblique distichis, oblongo-clavatis,
 15-19 \times 5, rectis vel curvatis, utrinque rotundatis, medio unisept-
 tatis, non constrictis, loculo superiore latiore, olivaceo-chlorinis.

Hab. in caulibus ramisque Genistae sericeae (Legumi-
 nosae), ad Njegusi, Montenegro.

- APHYSA** Theiss. et Sydow, Ann. Mycol. 15., 1917, p. 134, et p. 402. — 4691

A *Stigmatea* differt scutellis levibus margine tantum radiantibus;
 paraphysibus nullis. — Typ. gen. *Aph. Rhynchosiae* (K. et Cke. in
Stigmatea) Th. et Syd. (= *Parodiella* Schimperii P. Henn).

Sect. 5. Hyalophragmiae

- STIGMATODOTHIS** Syd., Philipp. Journ. Sc., O. Bot., IX, n. 2 (1914),
 p. 173. — Stromata subcuticularia, exigua, 1-loculigera, carbonacea,
 superne pluristratose et irregulariter radiatim contexta, haud ostio-
 lata sed superne tandem poro rotundo aperta, strato basali tenuis-
 simo, hypostromate parco per epidermidem profunde in contextu
 matricis penetrante massam compactam haud formante. Asci ovato-
 oblongi, 8-spori. Paraphyses haud typicae, cellulosae submucosae.
 Sporidia hyalina transverse pluriseptata.

1. *Stigmatodothis palawanensis* Syd., l. c., fig. 5. — Stromatibus am- 4692
 phigenis sparse vel laxe gregariis haud maculicolis rotundatis, de-
 presse hemisphaericis, 130-170 μ diam., atris, pro ratione facile se-
 cedentibus, sed inter cuticulam et epidermidem ortis, tota basi in
 pariete exteriori epidermidis sessilibus, primitus cuticula dein rupta
 et plus minus evanescente obtectis, carbonaceis, superne pluristra-
 tose irregulariterque radiatim contextis, haud ostiolatis sed tandem
 poro rotundo apertis, hypostromate inter epidermidis cellulas in

contextu matricis profunde penetrante, strato basali tenuissimo plano brunneolo; ascis ovato-oblongis, sessilibus, tenuiter tunicatis, apice rotundatis, $26-30 \times 14-16$, octosporis; paraphysibus hand typicis cellulosis, submucosis, sporidiis tristichis, clavulatis, superne rotundatis, deorsum angustioribus, transverse 3-septatis, non constrictis, rectis vel lenissime inaequilâteris, hyalinis, $14-17 \times 3,5-4$.

Hab. in foliis vivis *Dendrobii*, Palawan, Taytay, Ins. Philipp. (MERRILL).

Sect. 6. *Phaeophragmiae*

MELANOCHLAMYS Syd. ap. Fuhrmann et Mayor, Voy. Expl. Scient. Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 438 (1913), Ann. Mycol. XIII, 1915, p. 264. — Stroma membranaceum, dimidiato-scutatum, microthyriaceum, atrum, per cuticulam erumpens et subsuperficiale, ex hyphis radiantibus contextum, ambitu fimbriatum. Perithecia hypostromatica, globuloso-lenticularia, ostiolata, contextu minute fibroso. Asci clavati, octospori, paraphysati. Sporidia transverse pluriseptata, colorata. — Affine videtur *Gilletiellae* Sacc. et Syd. (*Heterochlamys* Pat.) a quo praecipue differt sporidiis coloratis

1. **Melanochlamys leucoptera** Syd., loc. cit., cum ic. — Stromatibus hy- 4693
pophyllis, sparsis, irregularibus, rotundatis vel oblongis, $0,5-2$ mm. longis vel latis, sub cuticula ortis, mox erumpentibus et partim cuticulae laciniis tectis, subsuperficialibus, atris, opacis, membranaceis, ex hyphis radiantibus longis, $2-2,5 \mu$ latis, flexuosis vel maeandrice curvatis, septatis, fascis contextis, ad ambitum multo tenuioribus albo-membranaceis et fimbriatis; peritheciis $2-10$ in quoque stromate, hypostromaticis, convexis, globuloso-lenticularibus, $80-130 \mu$ diam., contextu dilute brunneo minute fibroso; ascis clavatis, brevissime stipitatis, apice obtusis, $38-46 \times 9-10$, octosporis; filiformiter paraphysatis; sporidiis distichis, oblongis, utrinque obtusis, 3-septatis, ad septa leniter constrictis, cellula secunda superiore paullo latiore, ex hyalino mox obscure olivaceo-brunneis, $13-16 \times 3,5-4,5$.

Hab. in foliis languidis *Bambusaceae* cuiusdam, in dep. Magdalena prope El Banco, Columbia.

Sect. 7. Hyalodictyae

- *) **VIZELLA** (Sacc.) Emend. Theissen in Broteria XII, 1914, p. 13. — Syll. II p. 662, IX p. 1054, XVII p. 861, XXII p. 515. — Cnfr. etiam Theiss. e Syd., Ann. Mycol. XV, 1917, p. 401.
1. **Vizella Passiflorae** Rehm, Ascom. Philipp. IV, Leaflets of Philipp. Botany, VI (1913) p. 1945. — Peritheciis sessilibus, confertis, interdum fere confluentibus, dimidiato-orbicularibus, convexis, poro perspicuo pertusis, nigris, 150-200 μ latis, glabris, contextu membranaceo fusco, ad marginem hyphis brevibus radiantibus obsessis; ascis evanidis; sporidiis oblongis, continuis, utrinque rotundatis, fuscis, 20-25 \times 10.
- Hab.* in caulibus emortuis *Passiflorae* quadrangularis, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).
2. **Vizella Guilielmi** Rehm in Rick, Ann. Mycol. IX, 1911, p. 181. — Nomen nudum. — *Hab.* in *Sorocea ilicifolia*, America austr. — (Etiam sub *Linhartia Soroceae* Rehm, in l. c.).

STIGMATEACEARUM gen. dubia:

- AULACOSTROMA** Syd., Philipp. Journ. of Sc. Sect. C. Bot. v. IX, 1914, p. 176. — Theissen et Sydow, Ann. Mycolog. XIII, 1915, p. 256; XV, 1917, p. 403. — Stromata subcuticularia, radiato-contexta, demum cuticulâ ruptâ libera superficialia, hypostromate extenso obscuro in parte exteriori epidermidis, peripherice in hyphas radiantes ramosas dissoluta. Loculi lineares, inordinate in stromate discurrentes. Asci paraphysati octospori. Sporae phaeodidymae.
1. **Aulacostroma palawanense** Syd., l. c. fig. 7; Theiss. et Syd. l. c. 1915, tab. VI fig. 11-13. — Stromata epiphylla, plagulas primitus minutas orbiculares, mox confluentes majores et irregulares formantia, subinde folia fere tota obtegentia, plana, crustacea, atra, granulosa, peripherice in hyphas radiantes dissoluta; hyphis longiusculis, alternatim ramosis, fuscis, rectis vel irregulariter flexuosis, remote septatis, 4-5,5 μ crassis, in axillis bulbillulas irregulares vel oblongas concolores vel parum obscuriores gerentibus; peritheciis plus minus numerosis in quoque stromate, laxe vel densiuscule dispositis, a reliquiis epidermidis ruptae obiectis, linea-

*) Sec. THEISS. et SYDOW huic gen. spectant sporidia muralia hyalina nec continua obscura.

ribus, atris, 0,3-1,2 mm. longis, 150-200 μ latis, rectis vel varie curvatis, 80-90 μ altis, aut geniculatis, rima longitudinali apertis, contextu atro-fusco, marginem versus fusco, ex hyphis rectis vel subrectis remote septatis (articulis 15-25 μ longis 2,5-3,5 μ crassis) ad apicem dichotomo partitis composito, nucleo hyalino-viridulo mucoso; ascis subglobosis, ovatis vel ovato-oblongis, sessilibus, apice rotundatis, 48-55 \times 25-35, octosporis; paraphysibus superne subclavatis, hyalino-viridulis 1,5-2 μ crassis, mucosis; sporidiis distichis vel tristichis aut conglobatis, ellipsoideis vel oblongo-ellipsoideis, utrinque late rotundatis, medio 1-septatis, constrictis, ex hyalino fuscis, levibus, 20-25 \times 10-12; pycnidiosporis in peritheciis similibus evolutis, sessilibus, cylindræis, utrinque obtusis, continuis, hyalinis, 8-12 \times 2-2,5.

Hab. in foliis *Pandani Merrilli* (Pandanaeae), Palawan, Taytay, Ins. Philippin. (MERRILL).

PSEUDOLEMBOSIA Theiss., Ann. Mycol., XI, 1913, p. 432. — Theiss. 4697 et Syd., Ann. Mycol. XIII, 1915, p. 257; XV, 1917, p. 403. — Stromata subcuticularia, tecta, crustacea, absque hyphis liberis, radiato-contexta, loculis discretis linearibus. Asci paraphysati octospori. Sporae phaeodidymae. — Pycnidia lenticularia, subcuticularia, irregulariter rupta, conidiis brunneis cruciatim septatis. — Typ. gen. *Ps. geographica* (Mass. ut Lembosia) Th., *Ps. lenticularis* (Wint. ut Lembosia) Th.

Subfam. 2. **Hemihysteriæ** SPEG. (Polystomelleae Th. et Syd.)

Conspectus Gen. Polystomellacearum sec. THEISSEN et SYDOW

Fam. 2. **Polystomellaceæ** Theiss. et Syd.

Ann. Myc. 13, 1915, p. 158; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 195; 15., 1917, p. 404.

A. Ascomata superficialiter disposita, hypostromate intramateriali; disci ascigeri lineares

PARMULINEAE Theiss. et Syd.

I. Disci ascigeri radiatum dispositi

a) Ascomata centro inserta; paraphyses praesentes

1. Ascomata glabra, disci ascigeri stellatim dispositi; sporidia phaeodidyma

PARMULINA Th. et Syd.

2. Ascomata glabra, disci ascigeri flabellati; sporidia phaeodidyma
3. Ascomata setulosa; disci ascigeri irregulariter stellati; sporidia phaeodidyma
- b) Ascomata varie inserta
1. Ascomata pili conidiferi destituta; sporidia phaeodidyma; paraphyses praesentes
2. Ascomata pili conidiferi praedita; sporidia hyalodidyma; paraphyses nullae
- II. Disci ascigeri annulatim dispositi
- a) Ascomata centro inserta
1. Sporidia continua brunnea; asci 16-spori
2. Sporidia hyalodidyma; asci 8-spori; paraphyses praesentes
3. Sporidia phaeodidyma
- α) Disci ascigeri margine non radiantes; sporidia loculis subaequalibus praedita; paraphyses praesentes
- β) Disci ascigeri margine non radiantes; sporidia loculis inaequalibus praedita; paraphyses nullae
- γ) Disci ascigeri margine radiantes; paraphyses nullae
- b) Ascomata varie inserta
1. Sporidia hyalodidyma; paraphyses nullae
2. Sporidia phaeodidyma; paraphyses praesentes
3. Sporidia hyalodictya; paraphyses praesentes
- III. Disci ascigeri irregulariter dispositi
- a) Ascomata centro inserta; sporidia phaeodidyma
1. Paraphyses praesentes
2. Paraphyses absentes
- RHIPIDOCARPUM Th. et Syd.
- CHAETASPIS Syd.
- SCHNEEPIA Speg.
= Parmularia Lév. quia immaturum
- PARMULARIELLA P. Henn.
- CYCLOSTOMELLA Pat.
- CYCLOSCHIZON P. Henn.
- DIELSIELLA P. Henn.
= Maurodothis Sacc. et Syd.
- POLYCYCLUS v. H.
- INOCYCLUS Th. et Syd.
- POLYCYCLINA Th. et Syd.
- COCCONIA Sacc.
- MENDOGIA Rac.
= Uleopeltis P. Henn.
- MONORHIZA Th. et Syd.
MONORHIZINA Th. et Syd.

b) Ascomata varie inserta; sporae didymae

1. Hypostroma fasciculatum nullum

α) Sporidia hyalina

* Paraphyses nullae; asci rosulati

LAUTERBACHIELLA P. Henn.

** Paraphyses praesentes; asci conoideo-dispositi

CYCLOTHECA Th.

β) Sporidia brunnea

* Paraphyses nullae

HYSTEROSTOMELLA Speg.

** Paraphyses praesentes

HYSTEROSTOMINA Th. et Syd.

2. Hypostroma subcuticulare fasciculatum.
Mycelium liberum praesens; sporidia
phaeodidyma; paraphyses praesentes

LEMBOSIODOTHIS v. H.

B. Ascomata superficialiter disposita,
hypostromate intramatricali; di-
sci ascigeri rotundati

POLYSTOMELLEAE Theiss. et Syd.

I. Ascomata centro inserta

a) Fasciculi hypostromatici subcuticulares

1. Mycelium superficiale praesens setulis
erectis praeditum; paraphyses praesentes

DOTHIDASTEROSTOMELLA v. H.

2. Mycelium superficiale praesens, hyphis longis erecto-adscendentibus terminatum; paraphyses nullae

SCOLIONEMA Th. et Syd.

3. Mycelium nullum

DOTHIDASTEROMA v. H.

b) Fasciculi hypostromatici nulli; ascomata centro radicata

1. Ascomata singula, setuligera

ASTERODOTHIS Th.

2. Ascomata aggregata, glabra

POLYRHIZON Th. et Syd.

II. Ascomata varie inserta

a) Mycelium distinctum praesens; sporae didymae

1. Sporidia hyalodidyma; paraphyses praesentes; mycelium hyphopodiatum

ARMATELLA Th. et Syd.

2. Sporidia phaeodidyma

α) Paraphyses nullae; mycelium ramosum

PLACOSTERELLA Sacc.

β) Paraphyses praesentes; hyphae simplices circa ascomata radiantes

HYSTEROSTOMA Th.

b) Mycelium distinctum nullum

1. Disci ascigeri sub scutello commune dispositi, plechtenchyma hyalino separati

α) Paraphyses nullae

RHAGADOLOBIMUM P. Henn. et Lind.

β) Paraphyses praesentes

POLYSTOMELLA Speg.

2. Disci ascigeri scutello distincto separati

α) Sporidia continua hyalina; paraphys. praes.

ELLISIODOTHIS Th.

β) Sporidia hyalodidyma

* Paraphyses nullae

LEPTODOTHIS Th. et Syd.

** Paraphyses praesentes

SYMPELTIS Syd.

γ) Sporidia phaeodidyma

* Hypothecium hyalinum; disci ascigeri irregulariter distributi

Paraphyses praesentes

PALAWANIA Syd.

.. Paraphyses nullae

MELANOPLACA Syd

** Hypothecium carbonaceum; disci ascigeri circa partem centralem sterilem distributi; paraphyses praesentes

MARCHALIA Sacc.

δ) Sporidia hyalophragmia (4-loc.); paraph. praes.

GILLETIELLA Sacc. et Syd.

= Heterochlamis Pat. nec Turez.

ε) Sporidia phaeophragmia (4-loc.); paraphyses nullae

ACTINODOTHIS Syd.

3. Disci ascigeri concentrice dispositi, scutello distincto separati

PLEIOSTOMELLA Syd.

Sect. 1. Hyalosporae

ELLISIODOTHIS Theiss., Ann. Mycol. XII, 1914, p. 73; Theiss. et Syd. Ann. Mycol. XIII, 1915, p. 246; XV, 1917, p. 412. — Ascomata mycelio libero destituta superficialia, ex hypostromate epidermali oriunda punctis pluribus affixa, supra radiato contexta, carbonacea. Disci ascigeri rotundati. Hypothecium incolore molliusculum. Asci paraphysati octospori. Sporidia hyalina, unilocularia. — Typus gen. *Ellisiodothis inquinans* (E. et Ev. in *Asterina*) Theiss., l. c. p. 73 tab. VI fig. 5, *Asterula inquinans* (E. et Ev.) Theiss., Ann. Mycol. 1912 p. 193.

1. **Ellisiodothis Rhemiana** (Th. et Syd.) Theiss. et Syd., Ann. Mycol. 4698 XIII, 1915, p. 248, XV, 1917, p. 412, *Phyllachora Rhemiana* Th. et Syd., l. c. XII, 1914, p. 184. — Syn. *Phyll. ? Dioscoreae* Rhem, Phill. Journ. Sc. 1913, p. 183, non *Ph. Diosc.* (Schw.) Sacc. — Ascomata nigro-opaca e rotundata ellipsoidea magnitudine variabilia 180 μ diam. v. 250-350 × 180-200, ad caules late effusa; disci ascigeri solitari v. confluentes. ? Ascī (sec. Rhem) fusoides, 50-60 × 15 octospori. Sporidia disticha, clavata hyalina unilocularia, 12-15 × 5-6. Paraphyses filiformes.

Hab. ad caules Dioscoreae sp. (Dioscoreaceae), Luzon, ins. Philippin.

2. *Ellisiodothis microdisca* Syd., Ann. Mycol. XV, 1917, p. 221. — Stro- 4699
mata dense disposita, plerumque seriatim ordinata, superficialia, omnino orbicularia, 130-180 μ diam., discoidea, saepe confluentia, atra, opaca, subcarbonacea, radiatim contexta, ex hyphis 2-3 μ latis crebre septatis rectis vel subrectis composita; hypostromate epidermali; hypothecio hyalino fibroso; loculi discreti; strato obtegente tandem poro rotundo disrumpente; asci sessiles, clavati vel saccati, apice rotundati, 34-38 \times 12-15, tenuiter paraphysati, octospori; sporae ovato-oblongae, continuae, hyalinae, utrinque obtusae, 10-12 \times 4-5.

Hab. in foliis caulibusque Freycinetiae sp. (Pandanaeae), Biliran, Ins. Philipp. (R. C. Mc. GREGOR).

3. *Ellisiodothis Pandani* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 565. — 4700
Stromatibus ascigeris superficialibus, tota longitudine matrici adnatis, gregatim dispositis, subiinde confluentibus, ambitu plerumque rotundatis, 0,3-1 mm. diam., atris, opacis, subcarbonaceis, radiatim contextis ex hyphis 3-5 μ latis crebre septatis (articulis 6-10 μ longis) rectis vel subrectis compositis; hypostromate epidermali, per stomata erumpente; poro rotundo disrumpente; ascis ellipsoideo-oblongis usque clavatis, apice rotundatis et incrassatis, 50-70 \times 20-26, octosporis, copiose paraphysatis; sporidiis plerumque oblique monostichis usque distichis, ellipsoideis vel oblongo-ellipsoideis, utrinque obtusis, continuis, hyalinis, 17-20 \times 8-10,5.

Hab. in foliis Pandani luzonensis (Pandanaeae), Angat prov. Bulacan, Ins. Philippin. (M. RAMOS).

Sect. 2. Hyalodidymae

POLYSTOMELLA Speg. — Syll. IX p. 1063, XVI p. 639, XVII p. 865, XXII p. 522. — Onfr. Theissen et Syd., Ann. Mycol. XIII, 1915, p. 242.

1. *Polystomella repanda* Spegaz., Bol. Mycol. trop. in Bol. Ac. Nac. Cienc. 4701
Cordoba, t. 23., 1919, p. 144. — Stromata epiphylla majuscula 5-10 mm. diam., atra crustacea tenuia, difformia, ambitu irregulariter lobulato-repanda, hinc inde conferte v. laxè minuteque papillulato-ostiolata, contextu prosenchymatico-radiante fere opaco parum distincto: loculi sparsi parvi 150-200 μ subdiscoidei vix prominuli superne minute stellato-dehiscentes; asci obovati majusculi, 80 \times 50,

tunica crassa leniter violascente vestiti, aparaphysati, 68 spori; sporae ellipticae v. subovatae utrinque obtusiusculae, ad medium v. parum supra 1-septatae, non v. vix constrictae, loculis parum inaequalibus, supero saepius nonnihil brevior, primo hyalinae dein fuligineae, $35-40 \times 16-18$.

Hab. ad folia viva *Inga* e sp. (Leguminosae), in silvis prope Apiahy Brasilia (J. PUIGGARI).

2. *Polystomella Kawagooi* Hara, Botan. Mag. Tokyo XXIX, n. 338, p. 51 4702 (1915). — Stromatibus superficialibus, opace nigris, asperulis, parum gibbulosis, rotundatis v. irregulariter elongatis, 15 mm. long. 0,9-4 mm. latis $200-400 \mu$ altis, coriaceo-carbonaceis; contextu stromatico brunneo, parenchymatico, cellulis polygoniis, 4-10 μ latis, v. rotundato-ovoideis, $70-120 \times 50-80$, densis, loculis verticaliter stratosi; paraphysibus nullis; ascis cylindraceis v. elongato-ovoideis infra plerumque parum ventricosi, breviter pedicellatis, distichis v. tristichis, $50-60 \times 13-16$, apice rotundatis tunica ibique 2-3 μ crassa; sporidiis hyalinis, ovoideis v. ellipsoideis, utrinque rotundatis, uniseptatis, tunica tenui aequali praeditis, $16-20 \times 3-4$; loculo superiori quandoque parum crassiore sed brevior.

Hab. in utraque pagina foliorum *Pruni macrophyllae* et *Pr. spinulosae* (Rosaceae), Kagoshima, Japonia (KAWAGOI, UYEHARA, SASAKI).

3. *Polystomella Rubiacearum* G. Arnand, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 142, tab. XXIII. — *Pol. pulcherrima* Speg. 1889 p. p.

Hab. in foliis *Rubiaceae* ejusdam, Apiahy, Sao Paulo, Brasilia, America austr. (PUIGGARI). — Typus *Pol. pulcherrimae* Speg. est fungus in foliis *Solani boerhavifolii* vigens.

POLYCYCLINA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 212; XV, 1917, p. 408. — Ascomata tenuiter crustacea, ex hypostromate subepidermico brunneo pluribus in locis erumpenti orientia, radiatim contexta; disci ascigeri pluries concentrice annulati dispositi. Asci octospori aparaphysati. Sporidia bilocularia hyalina. — Typ. gen. *Pol. rhytismoides* (Speg. ut *Hysterostomella* (f)) Th. et Syd.

CYCLOTHECA Theiss., Ann. Mycol. XII, 1914, p. 70; XIII, 1915, p. 221; XV, 1917, p. 409. — Ascomata superficialia, radiato-contexta (saltem margine), irregulariter extensa, ex hypostromate in colore informi oriunda; disci ascigeri lineares numerosi, irregulariter distri-

buti. Asci octospori, paraphysati, colliculo cuneiformi, plechtenchymatico ex hypothecio formato impositi. Sporidia bilocularia hyalina. — Typ. gen. *Cycl. Miconiae* (Syd. ut *Polystomella*) Theiss. l. c.

ARMATELLA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 235, XV, 1917, 4706 p. 410. — Mycelium superficiale, ramosum, septatum, hyphopodiatum. Ascomata superficialia ex hypostromate epidermali extense oriunda, radiato contexta, punctis pluribus affixa, discum ascigerum unicum (an semper?) praedita. Asci paraphysati octospori. Sporidia hyalina bilocularia. — Typus gen. *A. Litseae* (P. Henn. ut *Dimerosporium*) Theiss.

LEPTODOTHIS Theiss. et Syd., Ann. Mycol. XII, 1914, p. 268, XIII, 4707 1915, p. 248, XV, 1917 p. 412. — Ascomata tenuiter crustacea, contextu radiato, superficialia. Hypostroma ex hyphis copiosis intercellularibus mesophyllum late occupantibus efformatum. Disci ascigeri immersi. Asci cylindranei paraphysati octospori. Sporidia hyalina bilocularia. — Typ. gen. *Lept. atramentaria* (B. et C. ut *Rhytisma*) Th. et Syd., l. c.

SYNPELTIS Syd., Ann. Mycol. XV, 1917, p. 221, XV, 1917, p. 412. — Stromata superficialia, radiato-contexta, tenuiter crustacea, stomatibus innata; loculi immersi, discreti, rotundati; asci cylindraneo-clavati, 8-spori, paraphysati; sporae hyalodidymae.

1. **Synpeltis Loranthi** Syd., l. c. — Stromata amphigena, saepius hy- 4708 pophylla, usque 1 cm. (vel ultra?) diam., tenuiter crustacea, atra, stomatibus innata, pluries affixa, usque 75 μ alta, radiatim ex hyphis pluristratos periphericis fuliginis centralibus obscurioribus 2-3 μ crassis contexta; loculi plani, discreti; asci cylindraneo-clavati; breviter stipitati, 60 75 \times 14-16, octospori; paraphyses copiosae, ascos superantes; sporae distichae, subfusioideae, ad apicem rotundatae, ad basim leniter attenuatae 1-septatae, non constrictae, hyalinae, 18-20 \times 5.

Hab. in foliis Loranthi pentagoni (Loranthaceae), Banco, Bontoc, Ins. Philipp. (PAT. M. VANOVERBERGH).

Sect. 3. Phaeodidymae

HYSTEROSTOMELLA Speg. — Syll. IX p. 1098, XI p. 385, XIV p. 708, XVI p. 655, XVII p. 892, XXII p. 556.

1. *Hysterostomella circularis* Har. et Pat. in Bull. Mus. Hist. Nat. Paris 4709 1911, p. 368. — Epi-rarius hypophylla; peritheciis numerosis concentricis 6-8 dispositis, coalitis, 6 mm. diam. attingentibus (singulo 0,5 mm.) exiguis, atris, dimidiato-convexis, basi in cuticulam impressis, circulatim rarius radiatim rima lineari dehiscentibus, distinctis dein margine in stroma compositum dimidiato-convexum, carbonaceum, ostiolis circularibus notatum confluentibus; peritheciis exterioris seriei diutius plus minusve distinctis; ascis numerosis, hyalinis, apice brunneolis rotundatisque, cylindraceis, fere sessilibus, 65×12 ; sporidiis distichis, primitus hyalinis dein pallide brunneis, ellipsoideis, 1-septatis, utraque apice rotundatis, ad septum non vel vix constrictis, $12 \times 5-6$; paraphysibus linearibus.
Hab. in foliis arboris ejusdam coriaceis, Chari, Bongoran, Congo gallico.
2. *Hysterostomella Puiggarii* Spegaz., Mel. Mycol. trop. etc. in Bol. Ac. 4710 Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 148. — Ita vocanda *Hyst. rhytismoides* Spegaz., quia jam exstat *Hyst. rhytismoides* Rehm (= ? *Lembosia rhytismoides* Schw.).

HYSTEROSTOMINA Theiss. et Syd., Ann. Myc. XIII, 1915, p. 228; XV, 1917, p. 409. — Est *Hysterostomella* paraphysata.

1. *Hysterostomina tenella* (Syd.) Th. et Syd., Ann. Myc. XIII, 1915, 4711 p. 228, *Hysterostomella tenella* Hk. et P. Syd., Ann. Mycol. X, 1912, p. 442. — Stromatibus amphigenis v. caules plus minus ambientibus, effusis irregularibus 2-10 μ long. tenuissime crustaceis, arcte adnatis, atris, glabris; loculis seu peritheciis numerosis, irregularibus, rimose v. irregulariter dehiscentibus, minutis; ascis primitus subglobosis v. ovatis cum sporidiis conglobatis, dein clavatis cum sporidiis distiche ordinatis, ad apicem valde incrassatis, $45-60 \times 16-20$, octosporis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio v. circa medium 1-septatis et constrictis, ex hyalino brunneis, $14-17 \times 7-8$.
Hab. in foliis *Asparagi striati* (Liliaceae), Despatch pr. Uitenhage, distr. Uitenhage, Cape Prov. (J. B. POLE EVANS), in caulibus ramisque *Asparagi* sp., Kentani, Cape Prov., Africa austr. (MISS A. PEGLER).
2. *Hysterostomina Bakeri* Theiss. et Syd., Ann. Mycol. XIV, 1916, 4712 p. 444. — Stromatibus epiphyllis, rotundatis v. irregularibus, saepe confluentibus, 1 cm. usque latis, applanato-membranaceis, opace nigris, 70-100 μ altis; loculis confertis, rimose erumpentibus; con-

textu superne radiato, atro-brunneo; basi sporigera 10 μ cr.; ascis ovoideis, dein elongatis, 40-55 \times 16-22, 8-sporis; sporidiis initio conglobatis, dein subdistichis, 18-21 \times 6-7, oblongis, hyalinis dein brunneis, bilocularibus, non v. leviter constrictis, cellula sup. saepe brevior et latior; paraphysibus subclavatis.

Hab. in foliis *Astrocaryi* sp. (Palmae), Parà in Horto Goeldiano, Brasilia (C. F. BAKER).

LEMBOSIODOTHIS v. Höhnelt, Ber. deutsch. bot. Ges. XXXV, 1917, 4713 p. 359 (nomen nudum); Ann. Mycol. XV, 1917, p. 369. — Mycelium superficiale. Ascomata superficialia valida. Hypostroma subcuticulare, dendritice contextum. Disci ascigeri elongati, scutello radiante praediti. Asci octospori, paraphysati. Sporidia brunnea bilocularia. — Typus gen. *Lemb. Dickiae* v. Höhn. (= *Aulographum maculare* B. et Br. var. *Dickiae* Rehm).

DOTHIDASTEROMELLA v. Höhnelt, Fragm. z. Mykol. X n. 491 (1910); 4714 Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 229; XV, 1917, p. 409. — Mycelium superficiale setulosum. Ascomata superficialia centro adnata. Hypostroma subcuticulare, radiatum, margine lacinulatum. Disci ascigeri rotundati pauci scutellati. Asci octospori, paraphysati. Sporidia bilocularia brunnea. — Typ. gen. *Doth. sepulta* (B. et C.) v. Höhn.

SCOLIONEMA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 410. — 4715 *thidasteromellae* affinis sed differt mycelio superficiale hyphis setuliformibus erectis praedito, nec non ascis sporidiisque magnis, paraphysibus nullis. — Typus gen. *Sc. Palmarum* (Kze. ut *Myxothecium*) Theiss. et Syd. (= *Asterina Palmarum* Gaill.).

DOTHIDASTEROMA v. Höhn., Fragm. z. Mykol. IX, 1909, n. 443. — 4716 Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 231; XV, 1917, p. 410. — Est *Dothidasteromella* mycelio superficiali destituta. — Typus gen. *Doth. maculosum* (B. et Br. ut *Rhytisma*) v. Höhn.

ASTERODOTHIS Theiss., Ann. Mycol. X, 1912, p. 179 — Theiss. et 4717 Syd., Ann. Mycol. XIII, 1915, p. 233; XV, 1917, p. 410. — Ascomata superficialia, centro innata, carbonacea, supra radiato-contexta, peripherice hyphas ramosas radiantia emittentia. Disci ascigeri rotundati in pulvinulo centrali inordinate dispositi. Asci octospori

paraphysati. Sporidia brunnea bilocularia. — Typus gen.: *As. solaris* (Kalch. et Oke. ut *Asterina*) Theiss. l. c. (Syn. *Lembosia Albersii* P. Henn., *Seynesia elegantula* Syd.).

POLYRHIZON Theiss. et Syd., Ann. Mycol. XII, 1914, p. 281; XIII, 1915, p. 234; XV, 1917, p. 410. — Ascomata superficialia, rotundata, orbicularia e pluribus ascomatibus circinantibus concreta; ascomata singula centro minuta, disci ascigeri rotundati, immersi, hypothecio molliusculo, supra plechtenchymatico, marginem versus radiato-contexta. Asci octospori, paraphysati. Sporidia bilocularia brunnea.

1. **Polyrhizon Terminaliae** (Syd.) Theiss. et Syd., Ann. Mycol. l. c., 4718
Dothidea Terminaliae Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 401. — Stromate epiphylllo, orbiculari, 2-3 mm. diam., tenui, atro, crustaceo; peritheciis basi immersis, parte superiore protuberantibus, plus minus distincte circulariter dispositis, irregularibus, carbonaceis, ca. 200 μ diam.; ascis clavato-cylindraceis, paraphysatis, 70-90 \times 14-16, octosporis; sporidiis distichis, oblongo-ellipsoideis v. ellipsoideis, medio v. circa medium 1-septatis et constrictis, uno fine rotundatis, altero plerumque leniter attenuatis, fuscis, asperulis, 17-24 \times 7-10, loculo superiore, latiore.

Hab. in foliis *Terminaliae Catappae* (Combretaceae), Wynaad, Indiae or. (W. Mc RAE).

PLACOASTERELLA Sacc., Ann. Mycol. VIII, 1910, p. 338. — Theiss. 4719 et Syd., Ann. Mycol. XIII, 1915, p. 236; XV, 1917, p. 411. — Mycelium superficiale, ramosum, septatum, exhyphopodiatum. Ascomata superficialia minuta asterinoidea, hypostromate epidermali innata, contextu interno et hypothecii laetiore molliusculo. Disci ascigeri pauci v. solitari. Asci aparaphysati octospori. Sporidia brunnea bilocularia. — Typus gen. *Pl. Schweinfurthii* (P. Henn. ut *Asterella*) Sacc., nec non *Pl. Rehmii* (P. Henn. ut *Asterella*) Sacc.

HYSTEROSTOMA Theissen, Ann. Mycol., XI, 1913, p. 509; Theissen et Syd., Ann. Mycol. XIII, 1915, p. 237, XV, 1917, p. 411. — Ascomata membranae epidermidis exteriori adnata, scutata, carbonacea, periphaerice in hyphas radiantes dissoluta. Disci ascigeri, pluries inordinate dispositi, centro colliculosi, rotundati v. elliptici. Asci paraphysati octospori. Sporidia phaeodidyma.

1. **Hysterostoma evanescens** (Rehm) Theiss. et Syd., l. c., *Dothidella* 4720

evanescens Rehm. Syll. XIV, p. 676. — Syn. *Hyst. Myrtorum* Theiss. l. c. p. 509, fig. VII. — *Microthyrium pseudodothidea* Rehm in litt., in Theissen, Broteria 1910, fasc. I p. 7. — Characteres generis. Ascomatibus epiphyllis, ambitu circulari 2-5 mm. diam.; hyphis radiantibus brunneis, arcte adpressis, 5 μ crassis, hyphopodiis destitutis; loculis dimensionibus maxime variantibus, rotundato-lenticularibus v. oblongatis, rima longitudinali dehiscentibus; ascis profuse paraphysatis, cylindraceis, octosporis, supra rotundatis, infra breviter pedicellatis, 80-100 \times 22-26, basi loculorum insertis; sporidiis distichis, diu hyalinis demum brunneis, 25-28 μ long., bicellularibus, cellula super. subglobosa, 10-13 μ , infer. elongato-conoidea, 16 \times 8.

Hab. in foliis *Myrtaceae* ejusdam, S. Leopoldo, Brasiliae merid.

2. *Hysterostoma orbiculatum* (P. et H. Syd.) Theiss. et Syd., l. c., *Dothidasteromella orbiculata* Syd., Ann. Mycol. X, 1912, p. 41. — Stromatibus amphigenis, sparsis omnino orbicularibus, aterrimis, 3-6 mm. diam., erumpenti superficialibus, ca. 200-325 μ cr., subcarbonaceis, non confluentibus, superficie irregulariter rugulosis, ambitu hyphis longiusculis radiantibus longitudinaliter plerumque dense parallele connexis fuscis aequaliter crassis 4-6 μ lat. distincte septatis vix v. leniter ramosis cinctis; stromatibus ascigeris v. peritheciis numerosis, dense stipatis, irregularibus, subinde curvulis, superne irregulariter dehiscentibus; ascis cylindraceo-clavatis v. clavatis, apice valde incrassatis et rotundatis, 75-140 \times 16-32, octosporis; paraphysibus numerosis, crassiusculis, 2-4 μ cr.; sporidiis 1-2-stichis, elliptico-oblongis, utrinque rotundatis, medio 1-septatis et leniter constrictis, fuscis, 20-35 \times 12-16.

Hab. in foliis *Oleae verrucosae* (Oleaceae), Bains Kloof pr. Wellington, Africae Austr. (E. M. Doidge).

3. *Hysterostoma Acokantherae* (P. Henn.) Theiss. et Syd., Ann. Mycol. XIII (1915) p. 238; Sacc., Notae Mycol. XXII p. 189 (R. Acc. Pad. 1917). — *Dimerosporium Acokantherae* P. Henn. — Syll. XI p. 259.

Hab. in foliis vivis *Acokantherae abyssinicae* (Apocynaceae), Mai Alacti, Nefasit (Hamasen). — Pulchra species, quae nisi stromate superficiali esset praedita, ad Rhytismatoideas, e. gr. ad gen. *Cocconiam*, accedere videretur. Asci ampli, clavati, apice crasse tunicati, 80-90 \times 30-35, octospori, copiose filiformi-paraphysati; sporidia constricto-didyma, disticha, initio strato hyalino cincta, 26-28 \times 12, diu hyalina, senio brunnea.

PALAWANIA Syd., Philipp. Journ. of Sc., Sect. C., Bot., IX, 1914, n. 2, p. 171. — Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 249; XV, 1917, p. 412. — Ascomata superficialia, carbonacea, radiato-contexta, ex hypostromate subepidermali per stomata erumpenti oriunda. Hypothecium tenue. Disci ascigeri rotundati inaequaliter distributi, discreti. Asci paraphysati octospori. Sporidia phaeodidyma. — Typ. gen. *Pal. grandis* (Niessl ut *Microthyrium*) Syd., l. c. cum icon. — Syn. *Seynesia calamicola* P. Henn. et Nym.

1. **Palawania Coccoes** Sydow, l. c. p. 172 f. 4. — Stromatibus ascigeris 4723 tota longitudine matrici adnatis, superficialibus, minoribus rotundatis vel oblongis et 0,3-1 mm. longis saepe plus minus confluentibus et tunc multo majoribus, usque 8 mm. longis, atris, opacis, carbonaceis, pluristratis, in medio crassis, marginem versus tenuioribus, radiatim ex hyphis fuscis 3,5-4,5 μ latis crebre septatis (articulis 6-9 μ longis) rectis vel fere rectis contextis, ad ambitum integris vel lenissime crenatis; hypostromate sub epidermide bene evoluto, strato basali tenui fusco, hypothecio fibroso; loculis in stromatibus minoribus duobus vel paucis, in stromatibus majoribus copiosioribus, discretis, haud confluentibus, non ostiolatis, sed strato obtegente tandem poro rotundo disrumpente; ascis ellipsoideis, sessilibus, apice rotundatis et incrassatis, 50-75 \times 20-26, octosporis; paraphysibus numerosissimis, hyalinis, filiformibus, sursum saepe leniter mucoso-coniunctis; sporidiis distichis usque tristichis, oblongo-ellipsoideis, utrinque obtusis vel leniter attenuatis, medio vel circa medium 1-septatis et leniter constrictis, ex hyalino fuscis, 22-24 \times 8-10.

Hab. in bracteis *Coccoes nuciferae* (Palmae), Palawan Taytay, Philippin. (MERRILL).

MELANOPLACA Sydow, Ann. Mycol. XV, 1917, p. 222, p. 412. — Ascomata tenuiter crustacea, contextu radiato, superficialia, ex hypostromate epidermali oriunda, ubique affixa, carbonacea, loculis rotundatis discretis, mycelio libero nullo; hypothecium pallidum, molliusculum; asci octospori paraphysati. Sporae phaeodidymae.

1. **Melanoplaca Dipteridis** Syd., l. c. — Stromata in maturitate plus minus 4724 late effusa, epiphylla, tenuiter crustacea, plura cm. metientia, atra orbicularia, ex hyphis dense connexis flavo-brunneis vel brunneis 2,5-3,5 μ crassis parallelis septatis composito, superficialia, hypostromate epidermali opaco denso, hypothecio pallido usque subhyalino tenui 10-15 μ crasso, loculi copiosi, dense dispositi, rotundati,

90-130 μ lati, 65-90 μ alti, opaci, discreti, ex hyphis radiantibus obscure olivaceo-fuscis fere opacis ca. 4 μ crassis copiose septatis compositi; in maturitate rotundate vel plus minus irregulariter aperti; asci ovati vel oblongo-ovati, aparaphysati, 8-spori, 42-50 \times 25-36; sporae oblongae, utrinque rotundatae, 3-4-stichae, ex hyalino olivaceo-fuscae, medio septatae non vel vix constrictae, 20-22 \times 8-9, loculis fere aequalibus vel supero paullo brevioribus sed latioribus.

Hab. in foliis *Dipteridis conjugatae* (Polypodiaceae), Panai, Benguet, Ins. Philipp. (MARY STRONG CLEMENS).

PARMULINA Theiss. et Sydow, Ann. Mycol. XII, 1914, p. 194; XIII, 1915, p. 195; XV, 1917, p. 406. — Ascomata rotundata superficialia, radiatim contexta, centro adnata. Disci ascigeri e centro radiantes. Asci octospori paraphysati. Sporidia bilocularia brunnescentia. — Typ. gen.: *Parm. exculpta* (Berk.) Th. et Syd., etc

1. *Parmulina* ? *asterophora* G. Arnaud, Ann. École Agricult. Montpel- 4725
lier t. 16., 1918, p. 118, tab. X. — Stromatibus 1,2 mm, diam., carbonaceis, circularibus, margine lobulatis lacinulatisque; ascis oblongis, ventricosis, erectis, strato paraphysoides circumdatis; sporidiis bilocularibus brunneis, 16,5 \times 7,5, loculis subaequalibus.

Hab. in foliis *Miconiae* (Melastomataceae), San Francisco das Campos, San Paulo, Brasiliae (F. NOAK).

MONORHIZA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 218; XV, 4726
1917, p. 409. — Ascomata rotundata, superficialia, tenuiter crustacea, radiatim contexta, centro innata. Disci ascigeri numerosi, lineares, irregulariter distributi. Asci octospori, paraphysati. Sporidia bilocularia brunnea. — Typ. gen. *Mon. longissima* (Rac. ut Lembosia) Th. et Syd., *Mon. nervisequia* (Berk., Sacc. ut Dothidella) Th. et Syd.

MONORHIZINA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 220; XV, 4727
1917, p. 409. — A gen. *Monorhiza* tantum differt quia aparaphysatum. — Typ. gen. *Mon. filicina* (Bk. et Br., ut Rhytisma) Th. et Syd.

RHIPIDOCARPON Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 197; 4728
XI, 1913, p. 456 (ut Subgen.); XI, 1917, p. 406. — Ascomata fimbriata, ex hypostromate subepidermico lateraliter orta, superficialia, radiatim contexta. Disci ascigeri lineares e centro radiantes. Asci

octospori, paraphysati. Sporidia brunnea bilocularia. — Typ. gen.: *Rh. javanicum* (Pat.) Th. et Syd.

POLYCYCLUS v. Höhn., *Fragm. z. Myk.* IX, n. 465 (1909); Theiss. et Syd., *Ann. Mycol.* XIII, 1915, p. 210; XV, 1917, p. 408. — Ascomata superficialia, radiatim contexta, centro adnata. Disci ascigeri annulatim concentricè dispositi, quandoque interrupti. Asci octospori, paraphysati. Sporidia bilocularia brunnea, inaequaliter septata. — Typ. gen. *Pol. andinus* (Pat. ut *Hysterostomella*) Th. et Syd.

INOXYCLUS Theiss. et Syd., *Ann. Mycol.* XIII, 1915, p. 211; XV, 1917, p. 408. — Ascomata superficialia, radiatim contexta, centro adnata. Disci ascigeri annulatim dispositi margine radiantes. Asci octospori, paraphysati. Sporidia bilocularia brunnea. — Typ. gen. spec. saeq. nec non *In. Myrtacearum* (Rehm ut *Hysterostomella*) Th. et Syd.

1. *Inocyclus Psychotriae* (Syd.) Th. et Syd., l. c., *Hysterostomella Psychotriae* Syd., *Enum. Philipp. Fgi.*, I, in *Philipp. Journ. of Sci.* VIII (1913) p. 275. — Stromatibus hypophyllis, plerumque plus minusve dense aggregatis, subinde 1-2 confluentibus, plerumque rotundatis, 0,5-1,25 mm. diam., atris, opacis, superficialibus, planis, membranaceis, facile secedentibus, centro plerumque tuberculo minuto punctiformi praeditis, marginem versus irregulariter radiatim contextis ibique ex hyphis dense connatis, fuscis, 2-3 μ cr. compositis; loculis irregulariter dehiscentibus, tandem late apertis; ascis clavatis, apice rotundatis, deorsum leniter attenuatis, subsessilibus, paraphysatis, 32-40 \times 8-10, octosporis; sporidiis distichis, intra ascos tantum visis, 1-septatis, oblongis, 9-12 \times 3-4, fuscidulo-coerulescentibus, sed haud jam maturis.

Hab. in foliis vivis *Psychotriae luzoniensis* (Rubiaceae), Luzon, Prov. Rizal, Antipolo (M. RAMOS). — Fructificatio immatura, inde species rursus inquirenda.

COCOCONIOPSIS G. Arnaud, *Ann. École Nat. Agricult. Montpellier*, t. 16., 1918, p. 113, tab. VIII. — Stroma centro tantum radicato; loculo ascigero annulari, simplici. Sporidia bilocularia, locula subaequalia, hyalina v. brunnea. — Gen. inter *Polycyclus* et *Inocyclus* medium. Species typica *Scolecopeltis Theissenii* Rick p. p. et tunc *Cocconiopsis Theissenii* (Rick!) Arnaud vocanda.

Sect. 4. *Hyalophragmiæ***GILLETIELLA** Sacc. et Syd. — Syll. XIV p. 691.

1. *Gilletiella apiahyna* Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. 4732
Cienc. Cordoba, t 23, 1919, Extr. p. 146. — Amphigena; thallus superficialis suborbicularis lobulatus, prosenchymatico-radians subhyalinum parum perspicuum per aetatem subevanescent; thyriothecia primo thallo albo tecta, serius nuda scutato-dimidiata; 150-200 μ diam., atra nitidula coriacea, ostiolo latiusculo rotundo 20 μ diam. perforata; asci obelavulati, apice obtuse rotundati, basi cuneati breviter crasseque pedicellati, 8-spori, 75-50 \times 9, paraphysibus filiformibus hyalinis obvallati; sporae distichae angustae subfusoidae, utrinque acutiuscule rotundatae, initio 1-, dein 3-septatae, ad septa non constrictae, hyalinae, 13-15 \times 3.

Hab. ad folia coriacea viva *Lauraceae*?, prope Apiahy, Brasilia (J. PUIGGARÍ).

2. *Gilletiella late-maculans* Rehm, Ascomyc. Philipp. VI, Leaflets of 4733
Philipp. Botany, VI (1914) p. 2278. — Peritheciis dimidiato-scutatis, discoideo-convexulis, nigris, poro vix conspicuo pertusis, 300-500 μ diam., in medio thalli superficialis vegetativi, membranacei-radiatum prosenchymatice excurrentis, subhyalinis formatis, parenchymatice fusce contextis, siccis applanatis, irregularibus; thallis mox confluentibus in maculas orbiculares 1 cm. circ. latas, viridulas, interdum obscurius marginatas; ascis clavatis, apice valde incrassatis, 40-45 \times 12-15, octosporis, paraphysibus gelatinoso-conglutinatis intermixtis; sporidiis tristichis, oblongo-clavatis vel fusiformibus, rectis, 3-(interdum 2-) septatis, non constrictis, hyalinis, senectute interdum fuscidulis, 12-15 \times 3-4.

Hab. ad « Arenyam », Los Baños, ins. Philipp. (S. A. REYES).

Sect. 5. *Phaeophragmiæ*

ACTINODOTHIS Sydow, Philipp. Journ. of Sc. Sect. C., Bot., IX, n. 2, 1914, p. 174. — Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 254, XV, 1917, p. 413. — Ascomata superficialia, orbicularia, radiato-contexta, pluristratosa; disci ascigeri 1-plures discreti, ex hypostromate epidermali parco oriundi, pluries affixi, hypothecio tenui, laeto, fibroso. Margine in hyphas liberas radiantes ramosas dissoluto. Asci aparaphysati bispori. Sporidia brunnea 4-5 locularia.

1. *Actinodothis Piperis* Sydow, l. c. p. 175 f. 6. — *Stromatibus epiphyllis*, 4734 singulis subinde hypophyllis, sine maculis, sparsis, superficialibus, ambitu semper orbicularibus, 1,5-3 mm. diam., discoideis, lenissime convexis, parte marginali plano quasi alatis, carbonaceis, opacis, radiatim contextis, centro ex hyphis crebre septatis compositis, parte marginali libero matrici haud adnato ex hyphis radiantibus valde dendriticeque ramosis (ramulis obtusis) fuscis 7-12 μ latis septatis (articulis 9-15 μ longis) composito; loculis 1 vel pluribus, sive paucis (2-4), sive copiosioribus (usque 15) in quoque stromate, discretis, haud confluentibus, non ostiolatis, sed tandem superne apertis, minutis; hypostromate in vel sub epidermide parce evoluta, filiformi, hypothecio pallido, strato basali tenui brunneo; ascis ovatis vel oblongo-ovatis, apice obtusis, bisporis, paraphysatis, 42-50 \times 20-26; sporidiis parallele positae, oblongis, utrinque late rotundatis, 3-4 septatis, ad septa leniter constrictis, fuscis, 33-40 \times 12-15.

Hab. ad folia viva *Piperis* sp. (Piperaceae), Palawan, Taytay Mt. Capoas, in ins. Philippinis.

Sect. 6. Hyalodictyæ

- MENDOGIA** Rac. 1900. — Syll. XVI, 669. — Syn. *Uleopeltis* Hen. 1904. — 4735 Syll. XVII p. 872. — Huc pertinent *Mendogia bambusina* Rac. (= *Mendogia bambusina* Syd., Ann. Myc. XII 1914, p. 565 fig. 3, sub *Uleopeltis*), *Mend. manaoensis* (P. Henn.) Th. et Syd.

PLEIOSTOMELLA Syd., Ann. Mycol. XV, 1917, p. 221, p. 413. — *Stromata superficialia, orbicularia, pluries affixa, hypostromate epidermali radiato-contexta, carbonacea, mycelio libero nullo, loculis annulatim dispositis sed discretis, rotundatis; hypothecium brunneolum; asci clavati, 8-sporei, paraphysati; sporidia murali divisa, hyalina.*

1. *Pleiostomella philippinensis* Syd., l. c. — *Stromata ascophora superficialia, sparsa, rotundata 2-4 mm. diam., plana, obscura brunnea, 140-180 μ alta, radiato-contexta strato tegente opaco 30-35 μ crasso, hypothecio brunneo 15-20 μ crasso; loculi numerosi, dense concentriceque dispositi, sed discreti, rotundati, 70-170 μ lati; asci clavati, 42-55 \times 16-19, ad apicem incrassati, octospori, paraphysibus mox mucosis praesentibus; sporae distichae, oblongae utrinque rotundatae, hyalinae (an semper?) transverse 5-6-septatae ad septum saepe constrictae, septis tenuissimis, cellulis pluribus vel omnibus*

septo longitudinali vel obliquo divisio, plasmate granuloso 16-18 \times 5-6.

Hab. in foliis *Palmae* cujusdam indet., Biliran Ins. Philipp. (R. C. MC GREGOR). — Habitus fere *Uleopeltis*.

Sect. 7. *Scolecosporæ*

CHAETASPIS Syd., Ann. Mycol. 15., 1917, p. 219. — Stromata orbicularia, superficialia, irregulariter radiato-contexta, puncto centrali orbicularia, superficialia hyphis vel setulis erectis tecta, centro sterili, loculis ascigeris e centro radiatim divergentibus linearibus. Asci paraphysati, octospori. Sporidia bicellularia, pallide olivacea. Conidia continua, aciculari-fusoidea, hyalina.

1. **Chaetaspis Stenochlaenae** Syd., l. c. — Stromata hypophylla, singula subinde etiam epiphylla, facillime secedentia, orbicularia, 2-4 mm. diam., superficialia, centro affixa ad superficiem hyphis vel setulis erectis continuis ad apicem obtuse attenuatis atro-olivaceis solitariis vel ad basin paucis coalitis, 70-120 μ longis 2-2,5 latis, laxe obsita, centro sterili pro ratione (praecipue in stromatibus junioribus) magno, $\frac{2}{4}$ - $1\frac{1}{4}$ mm. diam.; irregulariter irradiatim ex hyphis remote septatis rectiusculis pallide brunneis vel olivaceo-brunneis 2-2,5 μ latis ad peripheriam autem saepe anastomosantibus et irregulariter contextis composita; loculi e centro peripheriam versus radiatim positi, subinde irregulariter positi, usque 1 mm. longi, rima 70-100 μ lata aperti; asci parces paraphysati, clavati, 40-50 \times 10-12,5. 4787

Hab. in foliis *Stenochlaenae palustris*, Prov. Laguna (MC. GREGOR), San Antonio Prov. Laguna, Ins. Philipp. (M. RAMOS).

Subfam. 3. *Microthyriaceae*.

Trib. 1. *Microthyrinae*

Conspectus, Gen. Microthyriacearum sec. Th. et Syd.

3. *Microthyriaceae* (Sacc., Syll. Fung. II (1883) p. 658). — Theissen, Myc. Centralbl. 1913, p. 281; Theiss. et Syd., Ann. Mycol. 15., 1917, p. 413.

A. Mycelium distinctum nullum MICROTHYRIACEAE Sacc. et Syd.

I. *Hymenia polyasca*

- a) *Thyriothecia* (fructificatio) rotundata

1. Sporidia continua hyalina
 - α) Paraphyses praesentes MYIOCOPRON Speg.
 - β) Paraphyses nullae PELTELLA Syd.
 2. Sporidia bilocularia
 - α) hyalina MICROTHYRIUM Desm.
 - β) brunnea SKYNESIA Sacc.
(= Ferrarisia Sacc.)
SCUTELLUM Speg.
 3. Sporidia trilocularia, brunnea
 4. Sporidia 4-plurilocularia
 - α) hyalina
 - * Thyriothezia setulis destituta PHRAGMOTHYRIUM v. H.
 - ** Thyriothezia setulis peristomalibus
praedita CAENOTHYRIUM Th. et Syd.
 - β) brunnea HALBANIA Racib.
 - b) Thyriothezia linearia
 1. Sporidia hyalodidyma; paraphyses
nullae AULOGRAPHELLA v. H.
 2. Sporidia phaeodidyma
 - α) Paraphyses praesentes LEMBOSINA Th.
 - β) Paraphyses nullae MORENCINA Th.
- II. Hymenium monascum
- a) Asci in coronam periphaericam distributi STEPHANOTHECA Syd.
 - b) Asci diffusi
 1. Sporidia phaeophragmia PYCNOPELTIS Syd.
 2. Sporidia hyalodictya PYCNODERMA Syd.
- B. Mycelium distinctum praesens ASTERINEAE Sacc. et Syd.
- I. Thyriothezia hymenii plurimis praedita SYMPHASTER Th. et Syd.
 - II. Hymenium singulum (polyascum)
- ×. Thyriothezia rotundata
- a) Sporidia continua hyalina CALOTHYRIELLA v. H.
 - b) Sporidia hyalodidyma
 - α) Sporidia caudata; hyphopodia prae-
sentia CAUDELLA Syd.
 - β) Sporidia ecaudata; hyphopodia nulla CALOTHYRIUM Th.
 - c) Sporidia phaeodidyma
 - α) Hyphopodia nulla
 1. Thyriothezia glabra, non incrustata ASTERINELLA Th.
 2. Thyriothezia setuligera, mucoso-in-
crustata ASTEROMYXA Th. et Syd.
 3. Thyriothezia glabra, non incrustata;
mycelium leve, conidiis quadrilo-
cularibus praeditum CLYPEOLINA Th.

4. Mycelium setuligerum, conidiis
quadrilocularibus praeditum;
thyriotheciale via, non incrustata THALLOCHAETE Th.

β) Hyphopodia praesentia

1. Conidia mycelica quadrilocularia CLYPEOLELLA v. H.

2. Conidia mycelica unilocularia v. nulla

- * Thyriothecia demum mucoso-
incrustata

ENGLERULASTER v. H.

- ** Thyriothecia non incrustata

- * Paraphyses praesentes

PARASTERINA Th. et Syd.

- ** Paraphyses nullae

ASTERINA Lévl. (Syn. Dimerosporium
Fuck., Myxasterina v. H.)

δ) Sporidia transverse plurilocularia

- α) Sporidia hyalina

HALBANIELLA Th.

- β) Sporidia brunnea

AMAZONIA Th.

ε) Sporidia muriformia rubescentia

YATESULA Syd.

× ×. Thyriothecia linearia

- a) Asci 10-12 spori; sporidia continua
brunnea

LEMBOSIELLA Sacc.

- b) Asci 3-spори; sporidia bilocularia

- α) Sporidia hyalina; hyphopodia nulla

- * Paraphyses praesentes

LEMBOSIOPSIS Th.

- ** Paraphyses nullae

AULOGRAPHUM Lib.

β) Sporidia brunnea

- * Hyphopodia nulla

- . Paraphyses praesentes

ECHIDNODES Th. et Syd.

- .. Paraphyses nullae

ECHIDNODELLA Th. et Syd.

- ** Hyphopodia praesentia

- . Paraphyses praesentes

LEMBOSIA Lévl.

- .. Paraphyses nullae

MORENOELLA Speg.

Genera removenda quia incertae sedis: *Actinopsis* Starb., *Asteridiella* Mc Alp., *Chaetothyrium* Speg., *Kusanobotrys* P. Henn., *Ophiopeltis* Alm. et Cam., *Pemphidium* Mont., *Phaeosaccardinula* P. Henn., *Piptostoma* B. et Br., *Saccardinula* Speg., *Trichothyrium* Speg., *Trichopeltopsis* v. H., *Schenckiella* P. Henn. (Agyriaceae sec. Th. et Syd.).

Genera reiicienda: *Cryptopeltis* Rehm (Lichen), *Puiggariella* Speg. (Lichen), *Asteropeltis* P. Henn. (Lichen), *Asterella* Sacc. (= *Asterina*), *Asterula* Sacc. (= *Venturia*), *Asteronia* Sacc. (= *Asterostomella* v. *Vizella*), *Asteridium* Sacc. (= *Meliola*).

Sect. 1. Hyalosporae

MYIOCOPRON Speg. — Syll. II p. 659, IX p. 1053, XI p. 379, XIV p. 686, XVI p. 633, XVII p. 861.

1. **Myiocopron umbilicatum** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. 4738
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 134. — Subiculum nul-
lum; thyriothecia amphigena, hinc inde gregaria usque 3-5 mm.
diam., parva, 150-250 mm. diam., scutato dimidiata, atra glabra opaca
coriacea, eximie umbilicato-ostiolata, contextu prosenchymatico-ra-
diante peraeque perspicuo; asci e membrana basali exsurgentes con-
stipati ovati v. late elliptici, $50 \approx 30$, pseudoparaphysibus crassis
subcoalescentibus cincti, 8-spori; sporae ellipsoideae utrinque ro-
tundatae, laeves, hyalinae, $18 \approx 11$.

Hab. ad folia dejecta subputrescentia *Bignoniaceae* cujus-
dam (? *Amphilophium*), prope Apiahy, Brasilia (J. PUT-
GARI).

2. **Myiocopron Caseariae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Bue- 4739
nos Aires, XXIII (1912) p. 79. — Peritheciis epiphyllis, laxissime
gregariis, dimidiato-scutatis, vix convexulis, $350-500 \mu$ diam., atris,
tenui-membranaceis, subiculo omnino carentibus, contextu centro
fusco, ambitu subhyalino et subanhysto, obscure ostiolatis; ascis
obclavatis, crassiuscule tunicatis, filiformi-paraphysatis, $80 \approx 15-18$;
sporidiis clavulatis, rectis vel leniter inaequilateris, medium infra
abrupte attenuatis basique acutatis, continuis, hyalinis, $25-30 \approx 5-6$.

Hab. in foliis vivis *Caseariae silvestris* (Flacourtia-
ceae), in dumetis prope Calilegna, Jujuy, Argentina.

3. **Myiocopron Pandani** v. Höhnelt, Ann. Mycol., 17., 1919, p. 115. — 4740
Thyriotheciis nigris, epiphyllis in plagulis indefinitis crassiusculis,
irregulariter rotundatis v. elongatis $200-500 \mu$ long. $100-200 \mu$ latis,
saepe 2-3 confluentibus; scutellis obscure brunneis parum subpel-
lucidis, hyphis $2-4 \mu$ cr. radiantibus praeditis, margine fimbriatulo;
subiculo nullo; ostiolo irregulari plus minus elongato demum lato;
ascis late ellipsoideis supra crasse tunicatis, poro praeditis, $26-30$
 $\approx 18-20$; sporis hyalinis, tenuiter tunicatis, contentu granuloso,
semper continuis, elongato-ellipsoideis v. leniter clavatis, utrinque
rotundatis, in ascos coacervatis, $12-15 \approx 5-8$; paraphysibus prae-
sentibus.

Hab. ad folia sicca *Pandani* sp. (Pandanaeae), in Horto Bot.
Buitenzorg, Java (v. HÖHNEL). — Ad Lembosias transiens.

4. **Myiocopron Stigmatostalcis** P. Henn., Hedw. v. 48 (1908), p. 11. — 4741
Peritheciis gregariis, superficialibus, atris, scutellato-dimidiatis, poro
pertusis, cellulosis, $250-300 \mu$ circ. diam., confluentibus, atro-sub-
crustaceis, margine fibrosis; ascis clavatis, apice rotundatis, octo-
sporis, paraphysatis, $45-60 \approx 13-18$; sporidiis subdistichis, ellipsoi-

deis vel ovoideis, granuloso-farctis, continuis, hyalinis, 8-13 \times 4,5-5,5.

Hab. in pseudobulbis *Stigmatostalyeis radicans*, Capital, S. Paulo, Brasilia.

PELTELLE Sydow, Ann. Mycol. 15., 1917, p. 237, p. 416. — *Thyriothecia* superficialia, dimidiata, inversa, radiata, saepe confluentia, mycelio nullo; asci ovati octospori, apapophysati; sporidia continua, hyalina. — Est *Myiocopron* apapophysatum.

1. *Peltella conjuncta* (Syd.) Syd., l. c., *Myiocopron conjunctum* H. et P. 4742
Sydow, Ann. Mycol. XII, 1914, p. 200. — Peritheciis epiphyllis, omnino superficialibus, dense per totam foliorum superficiem distributis eamque omnino aequaliterque obtegentibus, plerumque compluribus valde approximatis et omnino confluentibus, atris, singulis 100-160 μ diam., contextu radiatim prosenchymatico fuligineo ex hyphis amoene radiantibus rectis 2-2,5 μ crassis crebre septatis (articulis 8-12 μ longis, in centro 5-6 μ longis) composito; ascis ovato-globosis, 28-32 \times 20-25, mucose paraphysatis; sporidiis conglobatis, ovatis vel ovato-oblongis, continuis (an semper?), hyalinis, 14-17 \times 7-8, intus multiguttulatis.

Hab. in foliis *Demonoropis* (Palmae), Los Baños prov. Laguna ins. Philippin. (O. F. BAKER).

Sect. 2. Hyalodidymae

MICROTHYRIUM Desm. — Syll. II p. 662, IX p. 1055, XI p. 379, XIV p. 687, XVI p. 635, XVII p. 862, XXII p. 516.

1. *Microthyrium Ramosii* Syd., Ann. Mycol. XV, 1917, p. 238. — *Thy-* 4743
riothecia hypophylla, in greges 3-6 mm. diam. parum perspicuos densiuscule disposita orbicularia, 70-90 μ diam., radiatim ex hyphis rectis creberrime septatis (articulis centralibus fere cubicis 2,5-3,5 μ diam., marginem versus longioribus, periphericis usque 6 μ longis) fusciculis composita, ambitu hyphis perpaucis tenerrimis hyalinis vel subhyalinis cincta vel suffulta; asci ovati ad apicem rotundati, apapophysati, octospori, 25-34 \times 12-15; sporae ovato-ellipsoideae vel oblongae, medio 1-septatae, non constrictae, hyalinae, 10-12 \times 3-4.

Hab. in foliis *Aganosmae acuminatae* (Apocynaceae), Rizal, Luzon, Ins. Philipp. (M. RAMOS).

2. *Microthyrium annuliforme* H. Sydow, Ann. Mycol. XII, 1914, p. 488. — 4744
Thyriothecia epiphyllis, maculis orbicularibus 4-8 mm. diam., sordide albidis lenissime bullatis insidentibus, praecipue ad marginem

macularum annuliformiter dispositis, rotundatis, 100-140 μ diam., atris, ex hyphis rectis crassis 3,5-4,5 μ latis crebriusculis septatis (articulis 9-12 μ longis) fuscis amoene radiantibus strato simplici compositis; ascis aparaphysatis, globulosis usque ovatis, 8-sporis, 35-45 \times 30-35; sporidiis conglobatis, ovato-ellipsoideis, infra medium 1-septatis, loculo supero 10-14 μ , infra 6-8 μ longo, totis 18-23 \times 7-10, hyalinis, rotundatis.

Hab. in foliis vivis *Capparidis sepiariae* (Capparidaceae), Iruttupallam, Coimbatore Madras Pres., Indiae or. (W. Mc RAE).

3. *Microthyrium Imperatae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4745

561. — *Thyriotheciis* superficialibus, sine maculis et sine mycelio, sparsis v. saepius maculiformiter aggregatis, orbicularibus, 100-150 μ diam., atris, sub microsc. pellucide v. fere pellucide castaneo-brunneis, circa porum centralem rotundum 10-12 μ latum atris et opacis, ex hyphis semper rectis 2,5-3 μ latis crebre septatis (articulis 4-7 μ longis) amoene radiatim contextis, ad ambitum breviter fimbriatis; ascis anguste saccatis, sessilibus, ad apicem obtuse attenuatis et incrassatis, 40-50 \times 10, octosporis, aparaphysatis; sporidiis distichis, fusiformibus, medio 1-septatis, non constrictis, utrinque attenuatis, hyalinis, 12-15 \times 2,5.

Hab. in foliis languidis v. subemortuis *Imperatae cylindricae* (Graminaceae), Angat pr. Bulacan, Philippin. (M. RAMOS).

4. *Microthyrium senegalense* Speg. in Anal. Mus. Nac. Buenos Aires 4746

XXVI p. 128 (1914) c. ic. — *Peritheciis* in matrice sordide cinerasciente superficialibus, sparsis vel laxissime gregariis, atris, dimidiato-scutatis, convexulis, 150-300 μ diam., astomis, glabris, coriicellis contextu indistincto atro opaco; ascis ellipsoideo-cylindraceis, vix pedicellatis, aparaphysatis, 30 \times 10; sporidiis distichis, ellipsoideo-subclavulatis, antice rotundatis, postice subacutiusculis, non vel lenissime inaequilateris, medio septatis, non constrictis, egutulatis, hyalinis, 9 \times 3.

Hab. in culmis aridis subputrescentibus *Penicillariae hypnoidis* (Graminaceae), in sepibus circa Daccar, Senegal.

5. *Microthyrium Lauraceae* P. Henn., Hedw. v. 48 (1908) p. 109. — Pe- 4747

Peritheciis epiphyllis, gregarie sparsis, dimidiato-scutatis, atris, 1 mm. circ. diam., poro pertusis, contextu reticulato-celluloso, margine radiato; ascis ovoideis, apice rotundatis, tunicatis, 4-8-sporis, 40-65 \times 40-45; sporidiis conglobatis, fusoides, utrinque subacutis vel obtusiusculis, curvulis, 1-septatis, constrictis, hyalinis, 25-35 \times 8-10.

Hab. in foliis *Lauraceae*, Rio Trombetas, ? Parà (A. DUCKE).

6. *Microthyrium Browneanum* Sacc., Notae Mycol. XXIV, p. 12 (Bull. 4748

Orto bot. Napoli, 1918). — Epiphyllum, remote sparsum, nigrum, superficiale, dimidiatum; peritheciis omnino applanatis, circularibus, subastomis, 600-800 μ diam., contextu irregulariter celluloso, non radiato, fuligineo, ambitu in marginem latiusculum hyalinum extenuato; ascis late ellipsoideis, utrinque obtuse rotundatis, 64 \times 52, basi apiculato-stipitatis, aparaphysatis, subtetrasporis; sporidiis parallele 4-seriatis, tereti-oblongis, utrinque obtusis v. acutiusculis, saepe curvatis, constricto-1-septatis, 35-40 \times 12-14, hyalinis.

Hab. in foliis *Browneae grandicipitis* et *Saraeae* sp. (Leguminosae), in Horto bot. Singapore (BAKER). — Pluribus speciebus e. g. *M. longisporo*, *M. Boivini*, *M. Coffeae* et imprimis *M. Millettiae* affine, tamen notis datis videtur sat diversum. Ob contextum non radiantem ad gen. *Dictyothyrium* esset referendum.

7. *Microthyrium patagonicum* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4749

Buenos Aires XXIII (1912) p. 78. — Peritheciis hypophyllis, sparsis, minutissimis, 85-100 μ diam., scutiformibus, vix convexulis, atris, centro umbilicatis et stellatim perforatis, ambitu integerrimis, membranaceo-parenchymaticis, hyphis paucis (3-6) radiantibus repentibusque, 25-50 \times 2-3, chlorinis, simplicibus ornatis, contextu olivaceo; ascis subellipsoideis, brevissime crasseque pedicellatis, apice tunicam incrassatam praebentibus, 30 \times 10-14, aparaphysatis, 6-8-sporis; sporidiis 2-3-stichis, subclavulatis, non vel vix inaequilateris, medio septatis, non constrictis, hyalinis, 12-14 \times 3-4.

Hab. in foliis vivis *Myrti lumaee* (Myrtaceae), in dumetis secus lacum Nahuel-Huapi, Argentina. — Jam extat *Micr. patagonicum* Speg. 1909 (cnfr. Sylloge XXII p. 516) tamen haec nova species nomine servanda, quia species anterior ad nov. gen. *Stomiopeltella* relata est.

8. *Microthyrium Grammatophylli* Sacc., Notae Mycol. XXIV p. 11 (Bull. 4750

Orto bot. Napoli, 1918). — Punctiforme, late et crebriusculè gregarium, nigrum plerumque epiphyllum, superficiale, dimidiatum; peritheciis plano-convexis, ambitu circularibus, 325-450 μ diam., anguste pertusis, contextu obscure celluloso, non radiato, fuligineo, margine cellulis teretiussculis apice rotundatis brunneis fimbriato; ascis breviter clavatis, brevissime noduloso-stipitatis, 45-50 \times 16, saepe obliquis, 4-6-sporis, filiformi-paraphysatis; sporidiis tereti-oblongis, distichis, subinde clavulatis apice magis rotundatis, 22 \times 6, diu continuis, dein medio 1-septatis non v. vix constrictis, egut-

tulatis, hyalinis.

Hab. in foliis emortuis *Grammatophylli speciosi* (Orchidaceae), culti in Horto bot. Singapore (BAKER). — Ob contextum non radiatum ad genus *Dictyothyrium* neotericorum spectaret.

9. *Microthyrium elatum* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4751 of Sci. VIII (1913) p. 254. — Peritheciis in maculis nigris, primitus orbicularibus, 0,5 mm. latis, mox vario modo confluentibus in maculas ellipsoideas irregulares, usque ad 3 cm. longas, 1 cm. latas innatis, solitariis, rarius congregatis, globosis, 100 μ diam., epidermidem fusco-violaceo tinctam hemisphaerice elevantibus vel longitudinaliter plicantibus, poro minutissimo apertis, excipulo proprio carentibus; ascis clavatis, apice rotundatis, sessilibus, octosporis, aparaphysatis, 60 \times 15; sporidiis distichis, ovoideis, infra medium, rarissime medio septatis, haud constrictis, hyalinis, 15 \times 7-8.

Hab. in petiolis emortuis *Coryphae elatae* (Palmae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (O. F. BAKER) — Quoad structuram videtur *M. circinans* Speg. valde proximum.

10. *Microthyrium Scutiae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4752 Buenos Aires XXIII (1912) p. 79. — Peritheciis saepius epiphyllis, sparsis, minutis, dimidiato-scutatis, 150-200 μ diam., margine repandulo sed integro, atris, glabris, rigidule membranaceis, contextu eximie radiante, centro subostiolatis; ascis obclavatis, apice subtruncatis, basi cuneato-rotundatis, 20-25 \times 5-6, aparaphysatis; sporidiis subtristichis anguste clavulato-fuscoideis, rectis vel vix inaequilateris, medio septatis, non vel vix constrictis, minutis, hyalinis, 8 \times 1,5.

Hab. in foliis vivis *Scutiae buxifoliae* (Rhamnaceae), in silvis prope Santa Cornelia, Jujuy, Argentina.

11. *Microthyrium Mischocarpi* Syd., Ann. Mycol. XV, 1917, p. 238. — 4753 *Thyriothecea* epiphylla, plura (3-10) in maculis minutis orbicularibus 1-2 mm. diam. viridulis collecta, orbicularia, dimidiata, atra, 140-170 μ diam., minute ostiolata, contextu radiato omnino opaco atro; ascis clavati vel ventricosi; 36-48 \times 14-16 breviter stipitati, octospori, aparaphysati; sporae distichae, breviter clavatae, superne late rotundatae, basim versus semper attenuatae, supra medium 1-septatae, non constrictae, hyalinae, 12-14 \times 13-3,5.

Hab. in foliis *Mischocarpi fusciscentis* (Sapindaceae), Mt. Maquiling, Laguna, Ins. Philipp. (O. F. BAKER).

12. *Microthyrium Alsodejæ* P. Henn., Hedw. v. 48. (1908) p. 109. — 4754 Peritheciis epiphyllis, sparse gregariis, dimidiato-scutatis, atris,

0,8-1 mm. diam., poro pertusis, contextu reticulato-celluloso, rufo-fusco, margine subhyalino radiato; ascis ovoideis vel subellipsoideis, tunicatis, octosporis, $70-80 \times 45-60$; sporidiis conglobatis, oblongis, curvatis, utrinque rotundatis, medio 1-septatis, intus granulatis, hyalinis, $50-60 \times 8-12$.

Hab. in foliis *Alsodeia* sp. (Violaceae), Rio Cumina, ? Parà (A. DUCKE).

AULOGRAPHELLA v. Höhnelt, Ber. deutsch. bot. Ges. XXXV, 1917, 4755 p. 354. — Est *Lembosiea* subiculo destituta. — Typ. gen. *Aylographella Epilobii* (Lib., ut *Aulographum*) v. Höhn., l. c.

PROTOTHYRIUM Arnaud, C. R. Ac. Sc. Paris, t. 164., 1917, p. 574. — 4756 Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 100. — Stroma superficiale, crustaceum, applanatum, cum mycelio interno in tota superficie inferiori anastomosans; sporidia bilocularia. Caeterum ut in Trib. *Protothyriaceae* Arnaud, l. c. — Species typ. *Prot. Salvadorae* (Cooke) Arn. (= *Phyllachora* (Dothidella) *Salvadorae* Cooke, *Asterella confluens* (Pat.) Sacc. etc.).

Sect. 3. *Phaeodidymæ*

SEYNESIA Sacc. — Syll. II p. 668, IX p. 1064, XI p. 381, XIV p. 689, XVI p. 639, XVII p. 865, XXII p. 522.

1. *Seynesia Alstoniae* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2227, Ascom. exsicc. 2164. — V. Höhnelt, Ann. Mycol., 16., 1918, p. 221. — Perithéciis in epiphylo haud maculato late sparsis, sessilibus, convexulis, minutissime papillulatis, interdum trigonis, 0,5-1 mm. diam., atris, glabris, dimidiato-scutatis, prosenchymatice-centrifuge contextis, ad marginem byphis simplicibus, obtusis, discretis, septatis, fuscis, 5μ latis, 50μ usque longe excurrentibus, ad apicem demum ramosae late apertis; ascis ovatis, crasse tunicatis, $50-70 \times 30-40$, octosporis, J +; paraphysibus ramosis 2μ cr., flavido-mucosis; sporidiis ellipsoideo-clavatis, medio, interdum infra medium, septatis et valde constrictis, obscure fuscis, utraque cellula transverse hyalino-zonata, strato mucoso tenui obductis, $27-30 \times 12-14$.

Hab. in foliis *Alstoniae macrophyllae* (Apocynaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

2. *Seynesia clavispora* Rehm, Ascomyc. Philipp. in Philipp. Journ. of Sci. VIII (1913) p. 190. — Maculis hypophyllis, primitus orbicularibus, 4-8 mm. diam., demum confluentibus et late explanatis, nigris, ex hyphis centrifugis, rectis, septatis, vix ramosulis, 3-4 μ latis, hyphopodia non gerentibus, plus minusve dense contextis; peritheciis versus centrum maculae dispersis, dimidiatis, poro pertusis, centrifuge ex hyphis 4 μ cr. parallelis subfusce contextis, glabris, usque ad 200 μ diam., radiatim in hyphas mycelii abeuntibus; ascis permultis, ovato-clavatis, sessilibus, apice crasse tunicatis, 50-60 \times 25-30, strato gelatinoso fuscido impositis obtectisque; sporidiis parallele positiss, elongato-clavatis, apice superiore 5 μ cr. inferiore acutatis, medio septatis, non constrictis, hyalinis, demum brunneis, 35-40 μ longis.

Hab. in foliis *Alyxia moniliferae* (Apocynaceae), Luzon, Prov. Laguna, Mt. Maquiling, ins. Philipp. (C. F. BAKER).

3. *Seynesia ipomoeae* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 488. — Mycelio nullo; peritheciis epiphyllis, in maculas 0,5-1,5 cm. latas, circulares dense dispositis, atris, applanatis, pusillis, 55-100 μ diam., stellatim dehiscentibus et aetate plus minus late apertis, contextu radiato atro opaco ex hyphis crassiusculis composito; ascis ovato-globosis, 30-35 \times 24-28, paraphysatis, octosporis; sporidiis conglobatis, ellipsoideo-oblongis, medio 1-septatis et leniter constrictis, utrinque rotundatis, ex hyalino flavo-brunneolis, tandem fuscis, levibus, 15-17 \times 7,5-8,5, cellula superiore saepe latiore.

Hab. in foliis vivis *Ipomoeae obscurae* (Convolvulaceae), Luzon, Manila, ins. Philipp. (MERRILL).

4. *Seynesia orbiculata* H. et P. Syd., Ann. Mycol. X, 1912, p. 39. — Peritheciis epiphyllis, in greges omnino orbiculares 4-8 mm. latos densissime aggregatis, radiato-contextis, contextu opaco, plerumque rotundatis et 90-175 μ diam. vel etiam parum elongatis aut irregularibus tunc longioribus, subiculo nullo; ascis ovatis usque clavatis, apice incrassatis, 35-60 \times 16-25, octosporis; sporidiis distichis v. conglobatis, ellipsoideis, utrinque rotundatis medio 1-septatis et constrictis, levibus, ex hyalino mox brunneis, 13-18 \times 6-8.

Hab. in foliis *Eucleae* sp. (Ebenaceae), Letaba Drift Zoutpansberg, Transvaal, Africa austr. (E. M. DODGE).

5. *Seynesia costaricensis* Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 208. — Maculae nullae v. totum folium pallescenti-flavescentis; subiculum nullum; thyrso-

thecia epiphylla, orbicularia, 90-120 μ diam., densissime constipata, inter se fere connata sed non confluentia, plagulas majusculas 4-8 mm. lat., orbiculares atras subcrustaceas matrici arcte adnatas efficientia, membrana basali destituta, ostiolo rotundo 20 μ cr. sed serius radiatim fissili perforata, margine integerrima ex hyphis radiantibus dense congestis creberrime septulatis (parenchyma simulantibus) efformata; asci subovati, mox diffuentes, 8-spori, 38-45 \times 30; sporae ellipsoideo-subobovatae, laeves, 1-septatae, ad septum constrictulae, loculo infero quam supero conspiciendo minore, primo hyalinae serius fuligineae, 20 \times 6-7.

Hab. in foliis vivis *Gaultherae odoratae* (Ericaceae), in silvis Volcán de Poás, Costarica, America trop.

6. *Seynesia Apuleiae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 80. — Peritheciis gregariis, saepius hypophyllis, crustulas nigras irregulares 0,5-5 mm. latas efficientibus, hemisphaerico-scutiformibus, 90-150 μ diam., astomis, fragilibus, per aetatem stellatim dehiscentibus, nucleo carnosulo chlorino faretis; ascis obovatis, breviter crasseque pedicellatis, superne crasse tunicatis, 40-70 \times 30-40; sporidiis ellipsoideis medio septatis, non vel vix constrictis, in juventute tunica mucosa, per aetatem evanescente, indutis, obscure fuligineis, 20-28 \times 10-12.

Hab. in foliis vivis *Apuleiae praecocis* (Leguminosae), in silvis prope Puerto León, Misiones, Argentina.

7. *Seynesia ficina* Sydow, Ann. Mycol. XIV, 1916, p. 365. — Peritheciis hypophyllis, dense gregariis, superficialibus, rotundatis vel saepe lobatis, 220-300 μ diam., atris, leniter carbonaceis, irregulariter dehiscentibus, contextu opaco radiato ex hyphis breviter articulatis 3-3,5 μ crassis composito; ascis variabilibus, subglobosis, ovatis vel elongatis, 4-8-sporis, plerumque 45-55 \times 35-40; sporidiis oblongis, utrinque rotundatis, medio vel circa medium septatis, non vel parum constrictis, levibus, ex hyalino fumoso-brunneis, 23-28 \times 10-14; conidiis copiose praesentibus late piriformibus, circa basim 1-septatis, aterrimis, 17-22 \times 13-16.

Hab. in foliis *Fici notae* (Moraceae), Los Baños ins. Philipp. (C. F. BAKER).

LEMBOSINA Theiss., Ann. Mycol. XI, 1913, p. 437; Theiss. et Syd., Ann. Mycol. XV, 1917, p. 417. — Est *Lembosia mycelio* destituta. — Typ. gen. *Lemb. copromyia* (B. R. S.) Theiss., et *Lemb. aulographoides* (B. R. S.) Theiss.

MORENOINA Theiss., Ann. Myc. 11., 1913, p. 434. — Theiss. et Syd., Ann. Myc. 15., 1917, p. 417. — Est *Morenoella* mycelio superficiale destituta. — Typ. gen. est *M. antarctica* Speg.

1. *Morenoina inaequalis* Maubl. et Arn., in Arnaud, Ann. Ecole Nat. 4765
Agricult. Montpellier t. 16., 1918, p. 139, tab. XXII. — Maublanc, Bull. Soc. Mycol. de F. t. 36., 1918, p. 40, fig. 10-11. — Maculis epiphyllis, irregularibus, saepe confluentibus. Mycelio externo nullo. Peritheciis dense gregariis, ellipticis, lanceolatis vel elongatis, saepe confluentibus et trigonis vel irregularibus, usque ad 250 μ longis, 80-100 latis, nigris, rima apertis, ex hyphis radiantibus, fuliginéis, 2,5-3 μ crassis compositis, ambitu non fimbriato. Ascis ovatis vel piriformibus, subsessilibus, apice late rotundatis et incrassatis, 22-28 \times 9-12, 8-sp., paraphysatis. Sporidiis conglobatis, ellipticis v. subclavatis, pallide fuliginéis, infra medium 1-septatis, loculo super. circ. duplo longiore quam infer., levibus, 8-10 \times 3,5-4.

Hab. in foliis vivis *Myrtaceae* ejusdam, Corcovado p. Rio de Janeiro, Brasiliae (A. MAUBLANC).

Sect. 4. Hyalophragmiae

PHRAGMOTHYRIUM v. Höhnelt, Fragm. z. Mykol. XVI, 1912, n. 725. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 416. — Est *Microthyrium* sporidiis hyalophragmiis donatum — ? Typ. gen.: *Phr. corruscans* (Rehm, ut Micropeltis) Theiss.

1. *Phragmothyrium fimbriatum* v. Höhnelt, Ann. Mycol., 17., 1919, p. 4766
115. — Thyriotheiciis subiculo destitutis, hypophyllis sparsis v. laxe gregariis, rotundatis, 220 μ latis, depressis, nigris, subpellucidis, obscure brunneis structura distincte radiata, margine plus minus fimbriatulo; ostioliis rotundatis 16 μ latis, margine 45 μ crasso limitatis; membrana basali tenni pallide brunnea radiata; paraphysibus nullis; ascis clavatis, infra inflatis, supra rotundatis et crasse tunicatis, sessilibus, 60 \times 14; sporis distichis, hyalinis, elongato-fusoideis, quadrilocularibus, circ. 16-20 \times 4.

Hab. in foliis adhuc viridibus *Ardisiae fuliginosae* (Myrsinaceae), in sylva Tjibodas, Java (v. HÖHNELT). — *Phragm. corruscanti* (Rehm.) Th. proximum.

CAENOTHYRIUM Theiss. et Syd., Ann. Mycol. XV, 1917, p. 417. — 4767
Mycelium nullum. Thyriotheicia superficialia, dimidiata, inversa, radiantia, membrana basali destituta, ostiolo setulis peristomalibus

paucis praedito. Asci hymenium simplicem basalem polyascum efformantes. Paraphyses nullae. Sporidia hyalina, plurilocularia. — Typus gen. *Caenothyrium alang-alang* (Rac., ut *Micropeltis*) Th. et Syd., l. c. — Syn. *Microthyrium Imperatae* Syd. immaturum (cnfr. pag. 424).

Sect. 5. Phaeophragmiae

SCUTELLUM Speg. — Syll. II p. 668, IX p. 1068, XVI p. 645, XXII p. 530.

1. *Scutellum javanicum* v. Höhn., Fragm. z. Myk. 726, Stzb. Ak. Wiss. 4768 Wien CXXI, 1, p. 348 (1912). — Peritheciis amphigenis, superficialibus, planis, atris, nitidulis, sparsis v. laxe gregariis, rotundatis, 250-350 μ diam., ostiolo nullo distincto sed in centro irregulariter apertis, membranaceis, subopacis, in centro minute cellulosi, pseudoparenchymaticis, ad marginem irregulariter sinuosum ex hyphis subparallelis 2 μ cr obscure brunneis compositis, margine non vel vix fimbriato; ascis octosporis, crasse clavatis superne rotundatis, inferne breviter attenuato-pedicellatis, 64-70 \times 33-34, aparaphysatis; sporidiis polystichis, oblongo-clavatis, utrinque rotundatis, 4-locularibus, diu hyalinis dein brunneis, ad septum medium parum contractis, 30 \times 12, loculo secundo superiore parum crassiore.

Hab. in foliis coriaceis *Orchidaceae* ejusdam, Tjibodas, Java.

PYCNOPELTIS Syd., Ann. Mycol. 14., 1916, p. 365. — Thallus superficialis consistens ex membranis simplicibus (strato cellularum unico) prosenchymatico radiantibus. Loculi (vel pycnothecia) monoascigeri, in ipso thallo formati, orbiculares. Asci aparaphysati. Sporidia phaeophragmia.

1. *Pycnopeltis Bakeri* Syd., l. c. — Membranis hypophyllis, primitus minutis orbicularibus, dein majoribus et saepe ad marginem lobatis, 150-220 μ diam., omnino superficialibus, atris, unistratosi, ex hyphis radiantibus plus minus pellucide brunneis creberrime septatis (articulis 4-7 μ longis, 3-4,5 μ latis) formati; loculis seu pycnotheciis plerumque ad marginem thalli setis minutis ascum unicum tantum includentibus; ascis globosis vel ovato-globosis, aparaphysatis, brevissime stipitatis, 24-28 \times 20-24, octosporis; sporidiis conglobatis, rectis vel leniter curvatis 2-vel saepius 3-septatis, diu hyalinis, tandem brunneis vel olivaceo-brunneis, utrinque rotundatis, hand con-

strictis, 15-18 \times 4,5-6.

Hab. in foliis *Ardisiae* sp. (Myrsinaceae), Los Baños ins. Philipp. (O. F. BAKER).

KRIEGERIELLA v. Höhnelt, Ann. Mycol. 16., 1918, p. 39. — Subiculum praesens, exhyphopodiatum. Thyriothechia membranacea, acute conoidea, apice breviter cylindracea ostiolata. Paraphyses nullae. Asci pauci inflati, octospori. Sporidia cylindraceo-clavata, brunnea, pluriseptata.

1. *Kriegeriella mirabilis* v. Höhnelt, l. c. — Subiculum laxum ex hyphis ramosis brunneis 2-3 μ cr. parce articulatis efformatum. Thyriothechiis sparsis v. seriatis, nigris magis altis quam latis apice rotundatis, 100-150 μ latis 100-160 μ altis, poro 30-35 μ lato apertis; membrana ex hyphis parallele radiantibus brunneis, 2-4 μ cr. tenuiter tunicatis efformato. Asci 2-3, octospori, basi vix pedicellati, supra breviter cylindraceo-rotundati, 60-80 \times 32-40; sporidia cylindraceo-clavata recta apice utrinque rotundata, 30-35 \times 9-10, sexlocularia, loculis terminalibus parum longioribus (7-9 μ).

Hab. ad acus putres *Pini silvestris* (Weiss föhre) (Coniferae), Königstein Saxonia, Germania (W. KRIEGER).

2. *Kriegeriella transiens* v. Höhnelt, Ann. Mycol. 16., 1918, p. 40. — Subiculum laxè reticulatum ex hyphis sordide violaceis 2-2,5 μ cr. parce ramosis et articulatis rectiusculis constitutum. Thyriothechiis sparsis saepius seriatis conoideis, 120-240 μ latis 80-100 μ altis, membranaceis, sed membrana basali destitutis, poro terminali rotundato 20 μ diam.; membrana ex hyphis rectis parallele radiantibus connexis obscure brunneis, 2-4,5 μ cr. efformata; ascis 6-10, octosporis basi inflatis apice late rotundatis, 60-64 \times 24-28; sporidiis plerumque 5-raro 4-locularibus, apice elongato-clavatis, utrinque rotundatis, 24-28 \times 7-9, loculo terminali 8-10 μ longo caeteris 3-4 μ .

Hab. ad acus putres *Pini uncinatae* (Coniferae), Fichtelberge Saxonia, Germania (W. KRIEGER).

Sect. 6. Hyalodictyae

STEPHANOTHECA Sydow, Philipp. Journ. of Sc. IX, 1914, p. 178. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 417. — Mycelium distinctum nullum. Thyriothechia superficialia, radiantia, centro sterilia. Asci singuli in plechtenchyma immersi et zona peripherica anulata efformantes, ovoidei, octospori, aparaphysati. Sporidia elongata,

hyalina, muralia. — Typus gen.:

1. *Stephanotheca micromera* Sydow, l. c. p. 179 fig. 8. — Peritheciis 4772
sparsis, sine maculis, omnino superficialibus, subiculo nullo, atris,
200-300 μ diam., ambitu orbicularibus, haud inversis, centro elevato
praeditis, subtus quasi brevissime crasseque pedicellatis, irregula-
riter radiatim contextis, contextu ex hyphis brevissime parenchy-
matice septatis crasse tunicatis (articulis 2-3 μ longis et 2-2,5 μ la-
tis) obscure fuscis marginem versus dilutioribus usque subhyalinis
compositis; ascis ad marginem perithecorum in strato diluto sitis,
ovatis usque oblongis, sessilibus superne rotundatis 20-28 \times 14-19,
octosporis, aparaphysatis, quoque asco in loculo proprio sito; spo-
ridiis 2-4-stichis, oblongo-clavulatis, apice late rotundatis basim
versus attenuatis, 3-5-septatis non constrictis, cellula una alterave
saepe semel verticaliter aut oblique septata, 11-16 \times 4,5-5,5.

Hab. in foliis vivis *Taxotrophis ilicifoliae* (Moraceae),
Palawan Lake Mariquao, Ins. Philipp. (MERRILL).

PYCNODERMA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 563 (Etym.
pycnos et *derma*) Trichopeltacearum. — Thallus superficialis, consi-
stens ex membranis simplicibus (stratu cellularum unico) prosen-
chymatico-radiantibus orbicularibus confluentibus. Loculi (vel pyc-
nothecia) monogascigeri, in ipso thallo formati, orbiculares. Asci
aparaphysati. Sporidia muriformia, hyalina.

1. *Pycnoderma bambusinum* H. et P. Sydow, Ann. Mycol. XII, 1914, 4773
p. 563. — Membranis epiphyllis, primitus minutis orbicularibus,
dein majoribus confluentibus et pelliculas forma irregulares saepe
lobatas et plerumque elongatas 1-4 mm. longas ca. 1-2 mm. latas
formantibus, omnino superficialibus, varii coloris (quoad maturita-
tem), primitus violaceo-brunneis, dein obscure brunneis, tandem
subatris, sub microscopio pellucide brunneis vel ad marginem saepe
pellucide flavidulo-brunneis, unistratosis, ex hyphis radiantibus ere-
berrime septatis (articulis 6-10 μ longis et 5-7 μ latis) formatis;
loculis seu pycnotheciis plerumque regulariter distributis, minutis
ascum unicum tantum includentibus; ascis globosis vel ovato-glo-
bosis, aparaphysatis brevissime crasseque stipitatis, 24-27 \times 20-25,
octosporis; sporidiis conglobatis, oblongo-ovatis, utrinque rotunda-
tis, primitus horizontaliter 3-4-septatis in maturitate 4-5-septatis
cum cellulis singulis vel omnibus semel longitudinaliter aut obli-
que septatis, ad septum medium subinde leniter constrictis, hya-
linis, 16-18 \times 7-9, rectis vel leniter inaequilateris.

Hab. in foliis vivis v. languidis *Bambusa vulgaris* et *Schizostachyi* (Graminaceae), Antipolo pr. Rizal, Ins. Philippin. (M. RAMOS).

2. *Pycnoderma circinans* Syd., Ann. Mycol. XV, 1917, p. 236. — Thy- 4774
 riothecia epiphylla, maculis orbicularibus brunneolis 3-5 mm. latis insidentia vel eas circinatim ambientia, fere semper densiuscule et circinatim disposita, primitus minuta orbicularia 150-200 μ diam., tandem (saepe confluyendo) majora irregularia et lobata, tunc usque 350 μ diam., brunnea centro ut videtur sterili subatro opaco, ambitu zonula angusta hyalina tandem evanescente cincta, contextu irregulariter minuteque celluloso; hymenia plura in quoque thyriotheccio, per totum thyriotheccium (centro opaco ut videtur excepto) dispersa, monoascigera; asci ovato-globosi, 20-28 \times 18-22, octospori, aparaphysati; sporae conglobatae, oblongo-ellipsoideae, utrinque rotundatae, transverse 3-septatae, non vel vix constrictae, loculis 1-2 plerumque mediis septo singulo longitudinali divisio, hyalinae, 12-15 \times 4,5-6.

Hab. in foliis *Bambusa* sp. (Graminaceae), Catubig River, Samar, Ins. Philipp. (M. RAMOS).

3. *Pycnoderma Villaresiae* Syd., Ann. Mycol. XV, 1917, p. 147. — Mem- 4775
 branis hypophyllis, sine maculis, in folii superficie plus minus dense distributis, atris, 150-220 μ diam., plerumque ambitu orbicularibus, subinde lobatis, haud raro confluentibus, omnino superficialibus sub microscopio fuligineo-brunneis, centro opacis atro-fuscis, unistratosis, ex hyphis radiantibus creberrime septatis (articulis 4-6 \times 3-4) formatis; loculis plus minus regulariter circa centrum sterilem dispositis, 26-35 μ diam., ascum unicum v. paucos includentibus; asci ovato-globosis, 22-28 \times 18-22, octosporis, aparaphysatis; sporidiis clavulatis v. oblongis, utrinque rotundatis v. apice rotundatis, basique tenuatis, rectis v. leniter inaequilateris, hyalinis, 3-septatis, cellula una alterave semel longitudinaliter v. oblique septatis, non constrictis, 13-16 \times 3,5-4,5.

Hab. in foliis *Villaresiae Gongonhae* var. *integrifoliae* (Icacinaceae), Palmeira Rio Grande do Sul, Brasiliae (ALFR. BORNMÜLLER).

*) Trib. 2. Asterinae (Sacc. et Syd.)

Conspectus analyticus ASTERINACEARUM

sensu Cl. SPEGAZZINI, *Rel. Myc. trop.* (Bol. Ac. Nac. Cienc. Cordoba, t. XXIII, 1919, Extr. p. 136).

1. Subiculum semper	{ plane nullum plus minusve late evolutum	2 6	
2. Thyriothecia	{ rotunde ostiolata perforata astoma, serius stellatim dehiscentia	3 4	
3. Sporae maturae	{ semper hyalinae v vix chlorinae fuligineae		MICROTHYRIUM Desm. SEYNESIA Sacc.
4. Sporae maturae	{ fuligineae semper hyalinae v. chlorinae		(1) SEYNESIOLA Speg. 5
5. Thyriothecia	{ glaberrima setulosa		(2) MICROTHYRIOLUM Speg. CHAETOTHYRIUM Speg.
6. Subiculum hyphopodiis	{ praeditum omnino destitutum	7 10	
7. Thyriothecia ab initio	{ rotunde ostiolato perforata astoma, serius stellatim fissa	8 9	
8. Sporae maturae	{ semper hyalinae v. vix chlorinae fuligineae		OPETHYRIUM Speg. (3) OPEASTERINA Speg.
9. Sporae maturae	{ semper hyalinae v. vix chlorinae fuligineae		HYALASTERINA Speg. ASTERINA Lévl.
10. Thyriothecia ab initio	{ rotunde ostiolato-perforata astoma, serius stellatim dehiscentia	11 12	

*) Genera sec. THEISSEN et SYDOW, l. c., plerumque dubia, tunc removenda v. incertae sedis.

(1) Typ. gen. : *S. chilensis* (Speg.) Speg.

(2) » » : *M. astomum* (Speg.) Speg., *M. circinans* (Speg.).

(3) » » : *O. Aspidii* (Heng.) Speg., *O. Dactiometis* (Heng.) Speg., *O. Elaeocarpi* (Syd.) Speg., *O. Holocalycis* (Speg.) Speg.

- | | | | |
|--------------------|---|----------------------------------|-------------------------|
| 11. Sporae maturae | { | semper hyalinae v. vix chlorinae | (1) CALOTHYRIOLUM Speg. |
| | | fuligineae | (2) OPASTERINELLA Speg. |
| 12. Sporae maturae | { | semper hyalinae v. vix chlorinae | CALOTHYRIUM Theiss. |
| | | fuligineae | ASTERINELLA Theiss. |

Sect. 1. Hyalosporae

*) **ASTERULA** Sacc. — Syll. I p. 47, IX p. 375, XI p. 254, XIV p. 692, XVI p. 646, XXII p. 534.

1. **Asterula Chamaecyparissi** Shirai et Hara in Bot. Magaz. Tokyo XXV 4776 (1911) p. 69, tab. 2 fig. 3-5. — Mycelio epiphyllis, ex hyphis radiantibus, brunneis, 3-5 μ crassis, crebre septatis formato; peritheciis mycelio insidentibus, sparsis vel gregariis, scutiformibus, poro circulari minuto in centro elevatulo pertusis, obscure brunneis, membranaceis, radiato-contextis, margine levibus, 150-210 μ diam., cellulis quadratis vel triangularibus, 5 \times 2-5; ascis oblongis vel cylindraceis, apice rotundatis, basi breviter crasseque pedicellatis, rectis vel curvatis, paraphysatis, octosporis, 38-50 \times 10-12; sporiis distichis, ellipsoideis vel oblongis, continuis, intus granulosi vel non, hyalinis, 13-15 \times 4-5.

Hab. in foliis vivis *Chamaecyparis obtusae* (Coniferae), Prov. Mino, Kawanye-mura, Japonia (K. HARA).

CALOTHYRIELLA v. Höhn. Ber. d. deutsch. bot. Ges. XXXV, 1917, p. 251. — Est *Calothyrium* Th. sporis hyalinis continuis donatum. — Typus gen:

1. **Calothyriella pinophylla** v. Höhn., Ann. Mycol. XV, 1917, p. 372. — 4777 Peritheciis orbicularibus, brunneis, tenuibus, ostiolo rotundo 9-12 μ lato, plano, obsolete marginato apertis, 80-130 μ lat., 20 μ cr., regulariter radiatim contextis, cellulis marginalibus radiatim partitis et in fimbriis pallidiores mutatis; subiculo tenuissimo subhyalino membranaceo; ascis deorsum clavatis ad apicem tenuato-obtusis,

(1) Typ. gen.: *C. coaguazuense* (Speg.) Speg.

(2) » » : *C. brasiliensis* (Speg.) Speg.

*) Typ. gen. *Ast. Epilobii* Desm., sec. v. HÖHNEL in THEISS. et SYDOW, Ann. Mycol. XV, 1917, p. 424, est *Venturia*, aliae, ad gen. *Asterinam*, ad Dothideaceas, etc. spectant.

36 $44 \times 7-8$, octosporis; sporidiis 2-3-stichis, hyalinis, oblongis, rectis, obtusatis interdum subfusoides v. clavulatis, continuis, 3-5-guttulatis, 10-13 \times 2-2,8; paraphysibus filiformibus sursum ramulosis.

Hab. in acubus *Pini austriacae* (Coniferae), Sonntagsberg, Austriae inf. (P. P. STRASSER).

Sect. 2. Hyalodidymae

AULOGRAPHUM Lib. — Syll. II p. 727, IX p. 1101, XI p. 386; XIV p. 711, XVI p. 659, XVII p. 895 XXII p. 558.

1. **Aulographum Ledi** Peck in N. Y. State Mus. Bull. 150 [1910] p. 23 4778 (1911). — Maculis circularibus, griseo-albidis, margine brunneo vel purpureo-brunneo cinctis; peritheciis epiphyllis, paucis, ellipsoideis vel oblongis saepe confluentibus et substellatim lobatis, erumpentibus, atris; ascis obovatis vel subglobosis; sporidiis ovatis vel oblongis, continuis, demum uniseptatis, hyalinis, 12-15 \times 6-8.

Hab. in foliis *Ledi groenlandici* (Ericaceae), Fine, St. Lawrence co. U.S.A. — Ob ascos subglobosos species facile dignoscenda.

2. **Aulographum melaspileoideis** Rehm in Ber. Bayer. Bot. Gesellsch. XIII 4779 (1912) p. 103. — Ascomatibus minutissimis, sparsis, sessilibus, linearibus vel rotundatis, atris, nitentibus, rima angustissima apertis, circ. 100 \times 50, contextu radiato, ex hyphis brunneis, septatis, parce ramosis, 20-30 \times 6-8, composito; ascis ovoideis, octosporis, 40 \times 12-14, paraphysibus ramosis tenuibus obvallatis; sporidiis polystichis, clavatis, utrinque rotundatis, medio septatis et ad septum paululo constrictis, utrinque 1-guttulatis, loculo inferiore interdum 2-guttulato, hyalinis, 10 \times 5.

Hab. in caulibus emortuis *Vaccinii Vitis-Idaeae* (Ericaceae), Stripsenjoch in Tirolia.

3. **Aulographum Myrtaceae** Theiss., Ann. Mycol. 16., 1918, p. 187. — 4780 Epiphyllum. Maculis nigris opacis, crustas circulares 3-6 mm. laticas efformantibus; hyphis superficialibus, brunneis septatis ramosis 5 μ cr. tunica crassa praeditis; hyphopodiis variabilibus, e cylindraceis rectis usque incurvatis et sublobatis, 5 μ latis 8 μ altis, v. breviter capitatis et 5-6 μ diam.; peritheciis linearibus, rectis v. curvis, superficialibus 180-240 \times 35-50 rimoso-apertis, radiantibus; ascis paraphysatis, ellipsoideis, breviter pedicellatis, 24-28 \times 14-16, octosporis, crasse tunicatis; sporidiis hyalinis, bilocularibus, 8-10 μ long., loculo super. 3-4 μ cr. inf. 2-3 μ , fortiter incurvatis; para-

physibus indistinctis.

Hab. in foliis *Campomanesia* sp. (Myrtaceae), S. Leopoldo, Rio Grande do Sul, Brasilia (THEISSEN).

4. *Aulographum fimbriatum* Sacc., Notae Myc. XXIII p. 68 (Acc. Veneto-trent. 1917). — Peritheciis hinc inde dense irregulariter gregariis et maculas atras, varias formantibus, superficialibus, applanatis, oblongis, 200-300 × 50-60, rima latiuscula percursis; contextu ex cellulis angustis subparallelis, radiantibus formato, fuligineo, basi zona eximie fimbriata pallidiore marginato; ascis cylindraceis brevibus, 25-30 × 6,5-7,5, sessilibus, apice rotundatis, crasseque tunicatis, 4-8-sporis, filiformi-paraphysatis; sporidiis subdistichis oblongis, utrinque obtusulis, 7-8 × 2-3, hyalinis, lenissime constrictis.

Hab. in rhachidibus emortuis *Demonoropis* (Palmae), in M. Maquiling, ins. Philipp. — Affine *A. Donacis* Niessl et *A. atromaculanti* P. et S. sed peritheciis basi fimbriatis et non stellatim dispositis, ascis angustioribus etc. distinguitur.

CAUDELLA Syd., Ann. Mycol., 14., 1916, p. 90 (Etym. *cauda* ob sporidia caudata). — Mycelium superficiale, repens, septatum, ramosum, hyphopodiatum. Thyriotheicia dimidiato-scutata, inversa, radiato-contexta vel melius ex hyphis maeandrice curvatis contexta, centro poro pertusa. Asci clavato-cylindracei, paraphysibus geminis nullis. Sporidia didyma, hyalina, basi longe caudata vel potius ciliata.

1. *Caudella oligotricha* Syd., l. c. — Hypophylla, plagulas indefinitas mediocres vel majusculas plus minus effusas usque 2 cm. longas laxas formans; mycelio laxissimo et parco, ex hyphis rectis vel subrectis fuscis 3,5-5 μ crassis remote septatis saepe plus minus rectangulariter ramosis composito; hyphopodiis sparsis, alternantibus, continuis, sessilibus, globosis, subglobosis vel ovatis; rarius crasse cylindraceis, integris, obtusis, 7-11 μ longis, 6-9 μ latis; thyriotheiciis laxe gregariis, orbicularibus, atris, 300-380 μ diam., centro poro rotundo 25-30 μ lato pertusis, lenticularibus, inversis, contextu fusco ex hyphis undulatis vel fere maeandrice curvatis ad marginem tenuibus 2-3 μ latis centrum versus magis regularibus crassioribus (3-4 μ) et distinctius septatis (articulis 4-6 μ longis) composito; ascis cylindraceo-clavatis, apice rotundatis et crasse tunicatis, basi breviter stipitatis, 85-105 × 16-18, octosporis, in massa mucosa (ex paraphysibus mucose diffluentibus constante?) sitis; sporidiis oblique monostichis, vel distichis, subfusoides vel anguste cylindraceo-clavatis, supra medium septatis, non vel vix con-

strictis, hyalinis, apice rotundatis, deorsum sensim attenuatis, basi longissime angustissimeque caudatis v. potius ciliatis, $25-34 \times 6-7$ (sine cilio), cilio hyalino recto v. curvato, 25×1 .

Hab. in foliis *Flacourtiaceae* sp., Seringal S. Francisco, Rio Acre, Brasilia (E. ULE). — Sporidiis caudatis a ceteris Microthyriaceis bene distinctum genus.

CALOTHYRIUM Theiss., Ann. Mycol. X, 1912, p. 160; Broteria 1914, p. 82. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 418. — Mycelium distinctum superficiale exhyphopodiatum. Thyriothecia radiata depressa centro ostiolata. Hymenium simplex, polyascum. Asci crasse cylindracei paraphysati quandoque distincte. Sporidia hyalodidyma. — Typ. gen. *C. nebulosum* (Speg.) Th., *C. pinastri* (Fuck.) Th. etc.

1. **Calothyrium jodascum** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. 4783 Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 139. — Epiphyllum; maculae nullae; subiculum laxissime reticulato-araneosum, hyphis gracilibus $4-7 \mu$, fuliginis modice septulatis alterne ramosis, hyphopodiis plane destitutis sed conidiis alternariiformibus ($40-45 \mu$ long.) conspersis efformatum; thyriothecia reticulo subiculari insidentia, laxe gregaria, scutato-hemisphaerica, $100-150 \mu$, astoma, atra glabra laevia opaca, serius stellatim dehiscentia, margine denticulato-fimbriata, coriacea, contextu prosenchymatico-radiante rectiusculo gracili crebriuscule septulato donata; asci obovati superne obtuse rotundati breviter minuteque pedicellati, paraphysati tunica leniter violascente vestiti, 8-sporei; sporae obovato-ellipticae, utrinque rotundatae, parum supra medium 1-septatae, non v. vix constrictae, loculo supero breviori latioreque, e globoso ovato, infero subobconicoideo, leves, hyalinae, $20-30 \times 15-16$.

Hab. ad folia coriacea viva plantae ignotae, prope Apiaty, Brasilia (J. PUIGGARI).

2. **Calothyrium leptosporum** Theiss., Broteria, Bot., v. XII, 1914, fasc. 4784 I, p. 21. — Sori epiphylli orbiculares minuti $2-3$ mm. lati; thyriothecia in singulis soris dense gregaria, superficialia, inversa, $100-150 \mu$ diam., applanata, radiato-contexta ex hyphis flexuoso-undulatis fuscis angustis $2,5 \mu$ cr., ambitu integro, centro parenchymatico demum rupto aperta. Mycelium laxum, ex hyphis angustis, flaccidis, griseo-fuscis, laxe ramosis septatisque, $2,5 \mu$ cr. formatum; hyphae imprimis ad superficiem thyriothecii binis v. ternis parallele junctis faveolos latiusculos efformant, ad marginem

excurrentes. Asci breviter cylindracei, octospori, supra rotundati, 55×14 , paraphysibus tenuibus flaccidis. Sporidiis distichis hyalinis, $10-12 \times 3,5-4$, cellula superiore paulum brevior et latior, cellula infer. longior cylindracea.

Hab. in foliis *Solanum* sp., São Leopoldo, Brasilia. — Socia *Asterina subreticulata* Speg. et *Phaeodimeriella guarapiensis* (Speg.) Th.

3. *Calothyrium subcolliculosum* Spegaz., Rel. Mycol. trop. etc. in Bol. 4785

Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 140. — Epiphyllum; maculae nullae; subiculum submembranaceum plagulas orbiculares 5-10 mm. diam. atras, centro pallidiores, majusculas matrici arcte adnatas efficiens, hyphis gracilibus, clathrato-reticulatis, fuliginosis hyphopodiis destitutis efformatum; thyriothea in plagulis subcircinatim circa centrum pallidius laxe gregaria, parva, 150-250 μ diam., scutato-depressa, astoma, stellatim dehiscens, margine minute crenato-denticulata, contextu pellucido et perspicuo; asci elongato-ovati obtusissime rotundati, deorsum-subcuneati ac in pedicello brevissimo crassoque producti, tunica dilute violascente vestiti, dense crasseque pseudoparaphysati, 8-spori, $80-100 \times 30-40$; sporae obovato-clavulatae, medio 1-septato-constrictulae, loculo supero globoso v. subovato obtuso, infero obconico acutiusculo donatae, hyalinae, laeves, $30-32 \times 15-16$.

Hab. ad folia viva coriacea plantae ignotae (! Rubiaceae), prope Apiaby, Brasilia (J. PUIGGARI).

LEMBOSIOPSIS Theiss., Ann. Mycol. XI, 1913, p. 435; Theiss. et Syd., 4786
Ann. Mycol. XV, 1917, p. 422. — Est *Lembosia* sporidiis hyalodidymis praedita. — Typus gen. *Lemb. Andromedae* (Tracy et Earle) Theiss.

*) **ASTERELLA** Sacc. — Syll. I p. 42, IX p. 393, XI p. 256, XIV p. 698, XVI p. 649, XVII p. 882, XXII p. 535.

1. *Asterella Puttemansii* P. Henn., Hedw. vol. 48 (1908) p. 11. — Ma- 4787
culis mycelii epiphyllis, rotundatis vel effusis, atro-crustaceis, hyphis repentibus, ramosis, fuscis, 4-5 μ crassis; peritheciis sparsis vel aggregatis, dimidiato-scutatis, radiato-cellulosis, atris, 140-200 μ diam.; ascis ovoideis, tunicatis, octosporis, $50-55 \times 23-25$; sporidiis subdistichis vel conglobatis, ellipsoideis, medio valde constrictis,

*) Typ. gen.: *A. megalospora* B. et C., sec. THEISS. et SYD. l. c. sporidiis brunneis donata et tunc ad gen. *Asterinam* pertinet.

mox dehiscens, 20-22 \times 10-12, cellulis subglobosis, hyalinis, 10-12 μ diam.

Hab. in foliis Myrtaceæ, Rio Grande, S. Paulo, Brasilia.

2. *Asterella? fumaginea* Dearn. et Barth., Mycologia IX, 1917 p. 349. — 4788

Peritheciis epiphyllis, gregariis v. folium fere totum subiculo fumagineo occupantibus; mycelio ex hyphis dichotomicis, anastomaticis brunneis septatis, 5-6 μ cr.; peritheciis globosis, setis 1-3 pungentibus, atro-brunneis, 100-400 \times 4-9, coronatis, rugulosis, atro-brunneis, 300-500 μ diam.; ascis sessilibus v. breviter ellipsoideis v. piriformibus, 45-60 \times 25-30, membrana 3 μ cr. praeditis, in quoque perithecio paucis, usque ad 10; sporidiis hyalinis clavato-oblongis, grumoso-nucleatis, 1-septatis, magnitudine variis, 15-25 \times 8-12, cellula sup. latiore.

Hab. in foliis vivis Panicis latifolii (Graminaceæ), Maricao, Porto Rico (F. L. STEVENS). — Vix hujus loci.

CALOTHYRIOLUM Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. Nac. Cienc.

Cordoba t. 23., 1919, Extr. p. 137. — Caracteres ex tabula synoptica p. 435 relata.

1. *Calothyriolum apiahynum* Spegaz. l. c. Extr. p. 141. — Amphigenum; 4789

maculae nullae; subiculum plagulas orbiculares subparvas 2-5 mm. diam., atras efficiens ex hyphis laxissime intertextis rectiusculis remotiuscule septulatis alterne ramosis, 5-9 μ cr., nodulis hyphopodiisque omnino destitutis fuligineis efformatum; thyriothecia in centro plagularum subiculi pauci-gregaria, pusilla, 90-100 μ diam. astoma, serius late stellato-fissa, atra, glabra, laevia, opaca, contextu radiante rectiusculo crebre septulato, ambitu parcee fimbriata; asci e globoso subobovati, antice obtusissime rotundati crassissimeque tunicati, postice brevissime crasseque pedicellati, paraphysati, octospori, 40 \times 35; sporae ellipsoideae v. vix subobovatae, medio 1-septato-constrictae, hyalinae, 20 \times 9.

Hab. ad folia viva coriacea Lauraceæ (? Persea), prope Apiahy, Brasilia (J. PUIGGARI).

MICROTHYRIOLUM Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc.

Cordoba, t. 23., 1919, Extr. p. 136. — Caracteres ex tabula synoptica p. 435 relata.

1. *Microthyriolum apiahynum* Spegaz., Rel. Mycol. Trop. etc. in Bol. Ac. 4790

Nac. Cordoba, t. 23., 1919, p. 135. — Epiphyllum; maculae orbiculares determinatae parvae, 1-2 mm., fusciscentes; thyriothecia pu-

silla 100-150 μ constipata in maculis saepius circinantia, astoma, serius centro stellatim dehiscencia, coriacea, ambitu non fimbriata vix denticulata, atra, contextu aegre perspicuo radiante recto crebre transverse septato, subiculo omnino destituto; asci obovati antice obtusissime crasseque tunicati, postice subcuneati, brevissime crasseque pedicellati, pseudoparaphysibus paucis crassis concomitati, 8-spori, 50×30 ; sporae elliptico-obovatae v. subclavulatae, medio 1-septatae non v. vix constrictae, loculis subaequilongis, supero elliptico-ovato obtuso, infero obconico acutiuscule rotundato, hyalinae postremo chlorinae.

Hab. in foliis coriaceis vivis Lauraceae (? *Persea*), prope Apiaby, Brasilia (J. PUIGGARI).

2. *Microthyriolum*? *oligosporum* Spegaz., Rel. Myc. trop. etc. in Bol. 4791
Ac. Nac. Cienc. Cordoba t. 23. 1919, Extr. p. 137. — Epiphyllum; maculae nullae; thyriothecia hinc inde dense gregaria (5-20), astoma 150-200 μ diam., serius stellatim dehiscencia, atra rugulosa glabra coriacea, contextu prosenchymatico-radiante non v. vix flexuosulo remote septulato, ambitu parce denticulato-fimbriata; asci e globoso obovati, antice obtusissime rotundati crassissimeque tunicati, postice subcuneati brevissime noduloseque pedicellati, tunica semper hyalina, paraphysati, saepius tetraspori, $50-60 \times 40$; sporae conglobatae, cylindraco-ellipticae, non v. vix subclavulatae, utrinque obtuse rotundatae, medio 1-septatae non v. vix constrictae, hyalinae, per aetatem leniter chlorinulae, $30 \times 12-15$.

Hab. in foliis vivis subcoriaceis ignotis (? *Solanaceae*), prope Apiaby, Brasilia (J. PUIGGARI).

Sect. 3. Phaeosporae

*) **ASTERONIA** Sacc. — Syll. I p. 47, XIV p. 693.

1. *Asteronia Lauraceae* P. Henn., Hedw. vol. 48 (1908) p. 11. — Ma- 4792
culis mycelii hypophyllis, gregariis, rotundatis, atro-crustaceis; peritheciis aggregatis, globulosis, cellulosis, 150-180 μ diam., ascis clavatis, apice rotundatis, octosporis, $30-35 \times 4-6$, paraphysatis; sporidiis subdistichis, oblongis, subfusoides vel clavatis, obtusis, brunneo-fuscis, $6-10 \times 2-3$; hyphis repentibus, radiantibus, ramosis, fuscis, $2-3 \mu$ crassis.

Hab. in foliis Lauraceae, Lontra, Rio Feio, S. Paulo, Brasilia.

*) Typ. gen. *A. erysiphoides* K. et C. nec non *A. appendiculosa* (M. et B.) Mont., sec. THEISS. et Syd. l. c. sunt fungi conidiferi.

Sect. 4. *Phaeodidymæ*

ASTERINA Lév. — Syll. I p. 39, IX p. 379, XI p. 255, XIV p. 693, XVI p. 646, XVII p. 875, XXII p. 537.

1. *Asterina tertia* Rac. ap. Theiss., *Gattung Asterina* (1913) p. 103. — 4793

Mycelio amphigeno indeterminato, atro, plagulas 1-3 mm. latas saepe confluentes efformante; hyphis obscure brunneis, 4 μ cr., septatis, cellulis elongatis, ramosis sed non valde intricatis; hyphopodiis sparsis, continuis, 3-4-lobatis, 8-13 μ latis, 5-8 μ altis; pycnidiiis et peritheciis conformibus, conoideo-applanatis, margine breviter nec semper fimbriatis, radiato-contextis; initio clausis dein centro laciniatum dehiscenibus; pycnidiiis 55-80 μ latis, conidiis continuis, ovatis, levibus, brunneis, 17-20 \times 12-15; peritheciis 120-160 μ diam.; ascis aparaphysatis, octosporis, 40-48 \times 20-23; sporidiis didymis, brunneis, levibus, 16-20 \times 8-10, ovoideis, medio leviter constrictis, utrinque rotundatis, loculo inferiore angustiore.

Hab. in foliis *Acanthacearum* (*Adhatoda*, *Crossandra*, etc.), Buitenzorg, Java. — Affinis *A. Lawsoniae* sed conidiis omnino brunneis, annulo aequatoriali hyalino carentibus. — Videtur mera forma *A. diplocarpæ*.

2. *Asterina melanomera* Syd., *Ann. Mycol.* XV, 1917, p. 241. — Pla- 4794

gulas plerumque epiphyllas 0,5-1,5 cm. latas irregulares formans; mycelium ex hyphis obscure brunneis rectangulariter ramosis 6-8 μ crassis septatis compositum; hyphopodia dispersa, solitaria continua crassa, obtusa, 11-14 μ alta, 10-11 μ lata, thyriothecia aequaliter densiusculeque disposita, orbicularia, convexa, 180-240 μ diam., radiatim contexta, ambitu fimbriata, contextu atro opaco; asci ovati vel ovato-globosi, 35-50 \times 30-40, 4-8 spori, ut videtur aparaphysati; sporae ellipsoideae utrinque rotundatae, medio septatae et valde constrictae, leves, obscurae vel atro-brunneae, 25-30 \times 12-14.

Hab. in foliis *Dasymschali clusiflori* (*Anonaceae*), pr. Paete, Laguna, Ins. Philipp. (C. F. BAKER).

3. *Asterina saginata* Syd., *Ann. Mycol.* XV, 1917, p. 241. — Plagulas 4795

epiphyllas 4-8 cm. diam. atras formans; mycelium matrici adpressum ex hyphis longiusculis plus minus distincte et copiose rectangulariter ramosis radiantibus obscure castaneo-brunneis 8-10 μ latis septatis (articulis 18-25 μ longis) compositum; hyphopodia haud numerosa alternantia, raro opposita sessilia, ovata, integra, 13-16 μ longa 10-11 μ lata; thyriothecia laxè aggregata, orbicularia vel

suborbicularia, 200-300 μ diam., aterrima, opaca radiatim ex hyphis crassis contexta, ad ambitum hyphis longis (usque 80 μ) 7-10 μ latis copiose fimbriata, asci globosi vel subglobosi ca. 45-50 μ diam., apapophysati; sporae ellipsoideo-oblongae, medio septatae et constrictae obscure brunneae, 27-30 \times 12-14.

Hab. in foliis *Polyalthiae* spec. (Anonaceae), Bataan, Luzon, Ins. Philipp. (M. RAMOS).

4. *Asterina porriginosa* Syd. in Leaflets of Philipp. Bot. V (1912) p. 4796. 1541. — Mycelio epiphylllo, plagulas minutas vel mediocres rotundatas subinde confluentes 1-5 mm. latas, atras, tenues efformante, ex hyphis fuscis ramosis 5-6 μ cr. composito; hyphopodiis alternantibus, sparsis, sessilibus, 1-cellularibus, cylindraceis vel subclavatis, apice rotundatis, 12-16 \times 3,5-6; peritheciis rotundatis, radiatim contextis, stellatim dehiscentibus, 160-220 μ diam., contextu opaco, ambitu hyphis radiantibus 3-4 μ crassis cinctis; ascis ovato-globosis, 40-54 \times 30-45, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et leniter constrictis, ex hyalino brunneis, verrucosis, 22-32 \times 11-16, loculo superiore subinde paullo majore.

Hab. in foliis vetustis *Ilicis cymosae* (Aquifoliaceae), Puerto Princessa, Palawan, ins. Philipp.

5. *Asterina malabarensis* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, 4797. p. 391. — Peritheciis hypophyllis, maculas irregulares 1 cm. longas efficientibus, irregularibus, mox rotundatis, mox autem elongatis v. forma irregulari, sublembosioideis, subinde confluentibus, 150-250 μ diam. v. usque 400 μ long., ambitu fibrillis radiantibus praeditis, contextu opaco, irregulariter dehiscentibus; mycelio parce v. modice evoluto, ramoso, ex hyphis obscure brunneis 4,5-6 μ diam. composito, hyphopodia pauca erecta usque 15 μ longa gerente; ascis ovatis v. ovato-clavatis, octosporis, apice leniter incrassatis, 45-58 \times 25-35; sporidiis oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, primo hyalinis, mox brunneis, 22-26 \times 11-13.

Hab. in foliis *Pothiscandentis* (Araceae), Kanouth, Malabar, Indiae or. (E. J. BUTLER).

6. *Asterina travancorensis* Sydow, Ann. Mycol. XIII, 1915, p. 38. — 4798. Epiphylla, plagulas minutas orbiculares 1-2 mm. diam. formans; mycelio ex hyphis rectis vel fere laxe ramosis septatis (articulis 20-30 μ longis) castaneo-brunneis 4-6 μ crassis composito; hyphopodiis modice numerosis, alternantibus, 12-18 μ longis, 8-11 μ latis, cellula superiore varie grosseque lobata vel incisa, inferiore brevi;

thyriotheceis crebre dispositis, rotundatis, 130-160 μ diam., stellatim dehiscentibus, ex hyphis rufo-vel castaneo-brunneis subrectis ambitum versus dichotome ramosis 3-4 μ crassis crebre septatis (articulis 4-8 μ longis) compositis, strato basali praeditis; ascis ovato-globosis, aparthysatis, 26-35 \times 22-28, octosporis; sporidiis ellipsoideo-oblongis, minute verrucosis, utrinque rotundatis, ad septum modice constrictis, fuscis, 18-22 \times 9-11, loculis fere aequalibus vel superiore parum majore.

Hab. in foliis *Marsdeniae* sp. (Asclepiadaceae), Pulliyanur, Travancore, Indiae or. (E. J. BUTLER).

7. *Asterina Nycticali* H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 4799 371 (*A. Nycticaliae*). — Maculis plerumque epiphyllis, orbicularibus vel irregularibus, atris, 3-5 mm. diam., mycelio ex hyphis paucis septatis obscure brunneis composito, ramis plerumque oppositis, anastomosantibus, 5-6 μ latis; hyphopodiis numerosis, plerumque alternantibus vel irregularibus, dichotomo-lobatis, 10-11 \times 12-15, 1-cellularibus; peritheciis numerosis, rotundatis applanatis, minutis, 90-110 μ diam., obscure brunneis, subopacis, stellatim dehiscentibus; contextu radiante ex hyphis septatis 4-5 μ latis composito; ascis ovatis vel subglobosis, 26-28 \times 18-20, octosporis, pararthysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, constrictis, brunneis, levibus, 15-18 \times 7-8.

Hab. in foliis *Nycticali cuspidati* (Bignoniaceae), Basiad, Taybas, Luzon, Ins. Philipp.

8. *Asterina fallaciosa* Syd., Ann. Mycol. XV, 1917, p. 240. — Epi- 4800
phylla, plagulas primitus orbiculares vel suborbiculares 3-5 mm. diam. mox irregulares et plus minus confluentes tandem saepe effusas formans; mycelium rectangulariter ramosum, ex hyphis rectis obscure castaneo-brunneis 5,5-8 μ crassis laxiuscule ramosis compositum, hyphopodia haud numerosa solitaria vel saepe perfecte opposita, irregulariter cylindracea vel plerumque ampulluliformia, 12-17 μ longa, basi 9-10 μ lata continua; thyriotheceia plerumque densiuscule disposita, rotundata vel elliptica aut oblonga, 220-320 μ diam. vel usque 400 μ longa et 200 μ lata, ex hyphis radiantibus, rectis copiose septatis obscure castaneo-brunneis 4-5 μ crassis copiose septatis (articulis centralibus 4-5 \times 6, peripheriam versus longioribus usque 16 μ) composita, ambitu hyphis similibus fimbriata; asci globoso-ovati, aparthysati, 50-60 \times 40-50, octospori; spores ellipsoideo-oblongae, utrinque rotundatae, medio vel circa medium septatae et vix vel leniter constrictae, fuscae, leves, 32-36 \times 17-19.

Hab. in foliis *Canarii* sp. (Burseraceae), S. Antonio, Laguna, Ins. Philipp. (M. RAMOS). — Habitus fere *Asterinellae obesae*, sed hyphae hyphopodiatae.

9. *Asterina Capparidis* Syd. et Butl., Ann. Mycol. IX, 1911, p. 390. — 4801

Mycelio plerumque epiphylllo, maculas rotundatas dein confluentes et crustas atras efficiente, ex hyphis repentibus intricato-ramosis anastomosantibus brunneis 3-4 μ cr. composito; hyphopodiis alternantibus, capitatis, superne sublobatis; peritheciis dense stipatis, lenticularibus, radiatim contextis, 90-120 μ diam., stellatim dehiscentibus; ascis ovoideis v. ovato-globosis, octosporis, 28-33 \times 20-26; paraphysibus sparsis, septatis, ramosis; sporidiis conglobatis, ellipsoideis, utrinque rotundatis, primo hyalinis, dein brunneis, 1-septatis, loculo superiore majore, 16-19 \times 8-10, episporio subtiliter granulato.

Hab. in foliis *Capparidis* sp. (Capparidaceae), Madras, Indiae Or. (E. J. BUTLER). — *Ast. sphaerascæ* Thüm. affinis sed ascis ovoideis octosporis diversa.

10. *Asterina papillata* Syd., Ann. Mycol. XIV, 1916, p. 92. — Amphigena, 4802

plagulas primitus minutas dein confluentes irregulares effusas griseolas formans; mycelio laxo ex hyphis fuscis 4-5,5 μ crassis remote septatis rectis composito; hyphopodiis haud numerosis alternantibus rectis vel subrectis, cylindraceis, 14-17 μ longis, 4-5,5 μ latis, cellula basali brevi, haud lobatis; thyriotheeciis laxè gregariis, rotundatis 140-200 μ diam., stellatim dehiscentibus, demum late apertis, non vel parum fimbriatis, ex hyphis rectis obscure castaneo-brunneis subopacis crebre septatis (articulis 5-7 \times 4-5) compositis, membrana basali praesente; ascis globosis usque ovatis, paraphysatis, 38-48 \times 35-42, octosporis; sporidiis ellipsoideis, grosse verrucosis, opace brunneis, medio constrictis, 24-28 \times 12-13.

Hab. in foliis *Capparidis* sp. (Capparidaceae), Seringal Anristella Rio Acre, Peruvia (E. ULE).

11. *Asterina Caricarum* Rehm — Syll. XIV p. 695 — var. *microspora* Theiss., 4803

Gatt. *Asterina* (1913) p. 96. — A typo differt sporidiis minoribus, 17-22 \times 8-11, hyphis plerumque rectis non undulatis. — Adsunt conidia (*Asterostomellae*) ellipsoidea, 13-19 \times 8, medio hyalino-eincta.

Hab. in foliis *Caricae Papayae*, C. sp. (Caricaceae) et *Loasaceae* cujusdam, in Brasilia, ex speciminibus Uleanis.

12. *Asterina Jacaratiae* Theiss., Ann. Mycol. XIV, 1916, p. 269. — Coloniis epiphyllis, tenuibus, sparsis v. approximatis, suborbicularibus, 4804

1-2 mm. latis; hyphis opposito-ramosis et pluries reticulato-con-

nexis, laete brunneis. 4 μ cr.; hyphopodiis oppositis v. rarius unifariis, 11-14 \times 8-10, stipitatis, bicellularibus, cellula basilari cylindracea, apicali capitata; peritheciis 100-140 μ diam., plano convexulis, centro papillatis, demum stellatim apertis, contextu inverse radiato, ex fibrillis 3-3,5 μ cr., laete brunneis formato; ascis aparaphysatis, 45 \times 32, octosporis; sporidiis bilocularibus, profunde constrictis, 17-20 \times 9-10, brunneis, articulis subglobosis. Conidiis ovato-oblongis, brunneis, 18 \times 8-9, zona aequatoriali pallidiori.

Hab. in foliis *Jacaratiæ dodecaphyllæ* (Caricaceae), in Brasilia merid. (ULE). — Affinis *Asterinae Caricarum* var. *microsporae*.

13. *Asterina Lophopetali* Rehm, Ascomyc. Philipp. V; Leaflets of Phil. 4805
lipp. Botany, VI (1914) p. 2228. — Plagulis epiphyllis, nigris, discoidalibus, 0,5-1 cm. latis, sparsis; hyphis mycelii parce ramosis, 6 μ circ. latis, septatis, fuscis; hyphopodiis clavatis, rectis, interdum subcurvatis, fuscis, 2-cellularibus, 12-15 μ altis, cellula superiore 6-8 μ lata, inferiore 5-6 μ ; peritheciis in mycelio sparsis, dimidiato-scutatis, primitus orbicularibus, mox linearibus, rectis, 300 μ longis, 100 μ latis, irregulariter ad apicem mox rimose apertis, fuscis, prosenchymatice centrifuge contextis, ad basim hyphis 4-6 μ cr. septatis longe excurrentibus ornatis; ascis ovoideis, aparaphysatis, J-, 40-50 \times 20-25; sporidiis oblongo-clavatis, medio vel paullulum superius septatis, subconstrictis, obscure fuscis, levibus, 25-30 \times 11-15.

Hab. in foliis *Lophopetali toxici* (Uelastraceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

14. *Asterina brasilliana* Spegaz., Rel. Myc. trop. etc. in Bol. Ac. Nac. 4806
Cienc. Cordoba, t. 23., 1919, Extr. p. 142. — Ita vocanda *Ast. Com-*
breti Syd. var. *brasiliensis* Thsz. quia secund. Cl. Spegazzini, mi-
nime varietas vero ut genuina species habenda.
15. *Asterina escharoides* Syd., Enum. Philipp. Fungi II, in Philipp. 4807
Journ. of Sci. VIII (1913) p. 489. — Epiphylla, maculas minutas
1-4 mm. latas efficiens; mycelio parco, ex hyphis anastomosanti-
bus, remote septatis, fuscis, levibus, 3,5-5,5 μ crassis composito;
hyphopodiis paucis, irregularibus, bicellularibus, cellula basali ple-
rumque breviter cylindracea, superiore multo latiore, parum lobata
et 8-10 μ lata, totis 12-18 μ longis; peritheciis aggregatis, rotun-
datis, 130-170 μ diam., stellatim dehiscentibus, contextu ex hyphis
rectis fuscis 2,5-3 μ latis radiatim composito; ascis globosis vel
subglobosis, aparaphysatis, 26-40 \times 24-32, octosporis; sporidiis ob-

longis, utrinque rotundatis, medio 1-septatis et leniter constrictis, primitus hyalinis dein brunneis in maturitate minute verruculosus, 17-22 \times 8-12.

Hab. in foliis vivis *Quisqualis indicæ* (Combretaceæ), Luzon, Manila, ins. Philipp. (MERRILL).

16. *Asterina perpusilla* Syd., Ann. Mycol., XIV 1916, p. 366. — Am- 4808
 phigena, præcipue epiphylla, nudo oculo non vel vix conspicua; mycelio parcissimo, nudo oculo vel etiam sub lente valida non conspicuo, solum sub microscopio visibili; laxissimo, ex hyphis paucis anastomosantibus olivaceo-brunneis leniter undulato-flexuosis remote septatis 2-3,5 μ crassis formato; hyphopodiis paucis, hinc inde solitariis, sessilibus, continuis, valde lobatis, plerumque latioribus (6-8 μ) quam altioribus (4-6 μ); thyriotheciis sparsis, ambitu orbicularibus, 70-160 μ diam., e strato simplici hypharum 2-3 μ crassarum olivacearum vel olivaceo-brunnearum undulato-flexuosarum vix septatarum (vel saltem septis vix conspicuis) radiatim compositis, ad marginem sæpe hyphis aequalibus plus minus longis fimbriatis, strato basali nullo, mox late apertis; ascis ovatis vel ovato-globosis, aparaphysatis, 25-30 \times 20-22, 4-8-sporis; sporidiis oblongis, utrinque rotundatis, medio vel circa medium septatis et parum constrictis, ex hyalino brunneis, levibus, 18-20 \times 9-11; conidiis in thyriotheciis similibus sed minoribus evolutis, continuis, late ovatis vel ovato-globosis, atro-brunneis, 18-22 \times 12-16.

Hab. in foliis *Alangii bezoniaefolii* (Cornaceæ), Los Baños, ins. Philipp. (C. F. BAKER).

17. *Asterina simillima* Syd., Ann. Mycol. XV, 1917, p. 242. — Epi- 4809
 phylla, plagulas minutas 1-2 mm. latas tenues formans; mycelium laxum, tenuiter expansum, ex hyphis gracilibus flexuoso-undulatis 3-4,5 μ crassis flavo-brunneis parce septatis ramosis alternantibusque compositum; hyphopodia alterna, sessilia, continua, varie lobata, 5-10 μ longa et alta; thyriothecia minuta, dense gregaria, 80-115 μ diam., applanate stellatim dehiscentia, mox late aperta, strato singulo ex hyphis rectis opace olivaceo-brunneis vel atro-olivaceis, 2-3,5 μ crassis (cellulis 4-7 μ longis) contexto, ambitu copiose fimbriata, membrana basali nulla; asci ovato-globosi, aparaphysati, 25-30 \times 20-24, octospori; sporæ oblongæ, brunneæ, utrinque rotundatæ, medio septatæ, vix vel leniter constrictæ, leves, 14-17 \times 6-7,5.

Hab. in foliis *Luffæ cylindricæ* (Cucurbitaceæ), Rizal, ins. Philipp. (M. RAMOS).

18. *Asterina Momordicae* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4810

13., 1918, p. 374. — Epiphylla; maculas 2-4 mm. latas, atras efficiens; mycelio ex hyphis remote septatis fuscis 5-6 μ crassis composito; hyphopodiis numerosis, irregularibus, unicellularibus, 8-12 μ longis, lobatis; peritheciis rotundatis, 80-90 μ diam., stellatim dehiscentibus; contextu ex hyphis rectis brunneis radiatis, 2,5-3 μ latis composito; ascis subglobosis, 35-40 \times 22-24, octosporis, paraphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis et constrictis, brunneis, laevibus, 19-21 \times 9-11; cellula superiore latiore.

Hab. in foliis *Momordicae* sp. (Cucurbitaceae), Mount Binnang, Prov. Taybas, Luzon, Ins. Philipp. (RAMOS et EDAÑO).

19. *Asterina tropicalis* Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. 4811

Cienc. Cordoba, t. 23., 1919, Extr. p. 211. — Maculae nullae; subiculum atrum tenuissimum laxissime araneosum alterne v. opposite ramulosum, hyphopodiis pediformibus, 10 \times 15, sessilibus alternis ornatum; thyriothecia laxae gregaria minuta rigidula, membrana basali destituta, astoma, centro radiatim rimosa, margine fimbriatula, atra, contextu fibroso-radiante parum distincto, 120-150 μ diam.; asci obovati, brevissime crasseque pedicellati, paraphysati, 8-spори, 45-50 \times 35; sporaе obovato-subcylindræae, utrinque obtusae, medio 1-septatae non v. vix constrictae, oculis subaequilongis v. infero leniter brevior, fuligineae, laeves, 24 \times 12.

Hab. in foliis vivis *Reediae dulcis* (Cyperaceae), in cultis S. José Costarica, America trop.

20. *Asterina Dillenia* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4812

p. 181. — Epiphylla, plagulas orbiculares 2-5 mm. latas atro-griseas formans; mycelio radiante, ex hyphis longiusculis ramosis obscure castaneo-brunneis regularibus remote septatis crasse tunicatis 7-9 μ latis composito; hyphopodiis haud numerosis alternantibus vel unilateralibus, continuis, globulosis, truncatis vel breviter cylindræis, castaneo-brunneis, rotundatis vel parum lobatis aut angulatis, 10-15 μ longis 9-11 μ latis; peritheciis sparsis, planis, inversis, rotundatis, 140-200 μ diam., stellatim dehiscentibus contextu subatro opaco ex hyphis 4-5 μ crassis composito; ascis globosis usque ovatis, paraphysatis, 40-60 \times 35-45, octosporis, sporidiis conglobatis, oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, ex hyalino fuscis, verrucosis, 20-25 \times 10-12.

Hab. in foliis *Dilleniae* sp. (Dilleniaceae), Palawan, Taytay, Ins. Philipp. (MERRILL).

21. *Asterina Ramosii* H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 4813
1918, p. 375. — Hypophylla; maculas suborbiculares, atro-griseas, 4-10 mm. diam. efformans; mycelio effuso, laxo, ex hyphis brunneis septatis ramosis 4-5 μ crassis composito; hyphopodiis paucis, alternantibus vel irregularibus, cylindraceis, globosis vel lobatis, 6-8 μ longis, 5 μ latis; peritheciis numerosis, rotundatis, 80-120 μ diam., subopacis, stellatim dehiscentibus, radiatim contextis; ex hyphis 4-5 μ latis composito; ascis ovatis, 18-20 \times 15-17, octosporis, paraphysatis; sporidiis conglobatis, oblongis, subinde late rotundatis, medio 1-septatis, ad septa-constrictis, laevibus, 14-16 \times 6-8.
Hab. in foliis *Dilleniae* sp. (Dilleniaceae), Catubig River, Samar, Ins. Philipp. (RAMOS).
22. *Asterina hians* Syd., Ann. Mycol. XIV, 1916, p. 91. — Epiphylla; 4814
plagulas orbiculares 2-4 mm. diam. atras formans; mycelio radiante ex hyphis longis rectis vel subrectis remote septatis fuscidulis 5,5-7 μ latis ramosis composito; hyphopodiis alternantibus, continuis, sessilibus, ovatis vel crasse cylindraceis, obtusis, integris, modice numerosis, 12-15 μ longis, 7-8 μ latis; thyriotheciis gregariis, rotundatis vel ellipticis, 65-90 μ diam., mox latissime apertis ex hyphis opace viridulis vel griseo-viridulis rectis 4-5 μ latis (septis 7-12 μ distantibus) strato simplici radiato contextis, laud fimbriatis; ascis ovatis, 25-35 \times 24-29, octosporis, aparaphysatis; sporidiis ellipsoideis, utrinque rotundatis, medio constrictis, ex hyalino opace viridulo-fuscis, levibus, 14-16 \times 6-7.
Hab. in foliis *Dioscoreae* (L.), Seringal, Auristella, Rio Acre, Peruvia (E. ULE).
23. *Asterina Anisopterae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4815
556. — Epiphylla, maculas parum definitas efformans; mycelio effuso, laxo, regulariter opposito ramoso, ex hyphis hinc inde anastomosantibus fuscis v. obscure fuscis 8-11 cr. (14-30 μ longis) nodos hemisphaerice prominulos 10-13 μ latos et altos gerentibus composito; thyriotheciis laxe gregariis, rotundatis, 200-300 μ diam. v. saepius ellipticis et tunc 250-500 μ longis 200-300 μ latis, leniter convexis, contextu ex hyphis fuscis v. subopacis rectis 6-8 μ crassis (articulis 10-12 μ longis) composito, ambitu hyphis brevibus radiantibus fimbriatis, sine membrana basilari; ascis aparaphysatis, ovato-globosis, 60-70 \times 45-55; sporidiis ellipsoideis, utrinque rotundatis, medio v. infra medium septatis et constrictis, sordide brunneolis, levibus, 32-38 \times 18-22.
Hab. in foliis *Anisopterae thuriferae* (Dipterocarpa-

ceae), prov. Rhizal, Ins. Philippin. (M. RAMOS).

24. *Asterina camarinensis* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4816 556. — Epiphylla, plagulas plus minus effusas 1-3 cm. (v. ultra) longas et latas formans; mycelio ex hyphis undulatis ramosis valde anastomosantibus obscure brunneis subopacis 7-9 μ cr. (articulis 20-30 μ longis) haud hyphopodiatis sed nodos gerentibus composito; nodis pro ratione numerosis, plano-hemisphaericis, parum prominulis, 9-11 μ crassis; thyriotheciis dense dispositis, semper ambitu rotundatis v. fere rotundatis, 350-450 μ diam., laxe et plane convexis, opacis, ex hyphis rectis 4-5 μ crassis compositis, ambitu mox parum mox magis fimbriatis, membrana basali nulla; ascis ovato-globosis v. ovatis, octosporis, aparaphysatis, 65-80 \times 40-60 sporidiis ovato-ellipsoideis v. ovato-oblongis, plerumque infra medium septatis et parum constrictis, totis 38-43 \times 20-26, loculo supero majore, infero parum minore et angustiore, dense minuteque verruculosos, brunneis.

Hab. in foliis *Parashoreae plicatae* (Dipterocarpaceae), Mt. Isarog, Camarines, Ins. Philippin. (M. RAMOS).

25. *Asterina shoreana* Sacc., Notae Myc. XXIII p. 61 (Accad. Ven. trent. 4817 1917). — Epiphylla, late sed remotiuscule gregaria, maculas nebulosas formans; peritheciis dimidiatis, ratione majusculis, 240 μ diam., vertice demum stellatim rimosis, nigricantibus; contextu radiato ambitu in zonam pallidiorum 20 μ latam fimbriatam decurrente; mycelio tenuissimo e filamentis 6-7 μ cr. fuscis e peritheciis radiantibus, repentibus; ascis globoso-ellipsoideis, sessilibus, 55-60 μ diam., octosporis, aparaphysatis; sporidiis conglobatis, constricto-didymis, loculo superiore crassiore et obtusiore, 30-40 \times 16, diu hyalinis, dein flavidis, demum brunneis.

Hab. in foliis languidis v. mortuis *Parashoreae plicatae* (Dipterocarpaceae), Los Baños, ins. Philipp. — Affinis *Ast. inaequali* Mont. sed asci et sporidia paullo minora. Probabiliter potius gen. *Asterinellae* adscribenda et a praecedenti non satis distincta.

26. *Asterina japonica* Theiss., Gatt. Asterina, p. 43, tab. VI fig. 22-23 4818 et VIII fig. 8, 13, 14 (1913). — Epiphylla; mycelio laxo, radiante; hyphis alterne ramosis, rectis, brunneis, 5 μ crassis; hyphopodiis alternis, continuis, hemisphaericis vel ovatis, obsolete lobatis, 5-8 \times 8-12; peritheciis dense gregariis, orbicularibus, 140-200 μ diam. vel ellipticis usque ad 350 \times 170, subcurvatis, poro centrali vel rima longitudinali dehiscentibus, ex hyphis 3-3,5 μ crassis, rectis,

brunneolis opace contextis, aetate ad marginem hyphis rectis in mycelium excurrentibus; ascis e globosis ovato-ellipsoideis, 45-68 \times 25-30, octosporis, jodi ope lenissime coerulescentibus, paraphysibus mucose-indistinctis hyalinis obvallatis; sporidiis brunneis, 20-23 \times 9-11, cellulis subinaequalibus utrinque rotundatis, constrictis.

Hab. in foliis *Elaeagni pungentis* (Elaeagnaceae), Tosa, Japonia.

27. *Asterina Elaeocarpi* Syd., Leaf. Philipp. Bot., IV, 1911, Art. 62., 4819 p. 1156. — Mycelio epiphylo, maculas atras formante vel saepius totam folii superficiem irregulariter obtegente, atro, et hyphis dense breviterque ramosis 4-6 μ crassis hyphopodia alternantia 6-7 mero longa gerentibus composito; peritheciis dense sparsis, radiatim contextis, 100-180 μ diam., atris, centro perforatis; ascis ovatis, 42-60 \times 28-35, octosporis; sporidiis conglobatis, ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, et hyalino fuscis, 26-30 \times 10-13.

Hab. in foliis *Elaeocarpi pendulae* (Elaeocarpaceae), Todaya, Ms. Apo, Distr. Davao, ins. Mindanao, in Philipp. (ELMER).

28. *Asterina Breyniae* Syd., Ann. Mycol. XV, 1917, p. 242. — Epiphylla, 4820 plagulas minutas 1-3 mm. latas formans; mycelium ex hyphis rectiusculis obscure brunneis septatis ramosis 5-7 μ latis compositum; hyphopodia modice copiosa bicellularia, 12-15 μ alta, cellula inferiore breviter cylindracea, superiore multo crassiore, 10-12 μ lata, valde profundeque lobata vel incisa; thyriothecia aggregata, orbicularia, 150-250 μ diam., contextu olivaceo-brunneo opaco ex hyphis rectis 3-4 μ crassis radiatim composito, stellatim dehiscentia, ambitu plus minus fimbriata; asci ovato-globosi, paraphysati, 45-55 \times 30-38, octospori; sporidia ellipsoideo-oblonga, medio septata et constricta, utrinque rotundata, in maturitate verrucosa, brunnea, 21-25 \times 10-11.

Hab. in foliis *Breyniae cernuae* (Euphorbiaceae), Bonhoc, Luzon, Ins. Philipp. (H. S. YATES).

29. *Asterina breyniaecola* A. Trotter n. nov., *Ast. Breyniae* H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 370, nec Sydow. — 4821 Epiphylla, maculas orbiculares vel irregulares efformans, atras, 1-3 mm. diam., vel confluentes et plus minus totam folii superficiem obtegentes; mycelio ex hyphis ramosis anastomosantibus obscure brunneis septatis 4-5 μ crassis composito; hyphopodiis paucis, alternantibus vel irregularibus, rotundatis, lobatis, vel angulatis, 10-15 \times 7-8; peri-

theeciis numerosis rotundatis, obscure brunneis, subopacis, 40-50 μ diam., irregulariter dehiscens, contextu ex hyphis radiatis 3-4 μ latis composito, mox pseudo-parenchymaticis; ascis ovatis 25-30 \times 15, octosporis, aparaphysatis; sporidiis elongatis, utrinque rotundatis, constrictis, fuscis, laevibus, 12-15 \times 4-5, loculo superiore majore.

Hab. in foliis *Breyniae acuminatae* (Euphorbiaceae), Bontoc, Luzon, Ins. Philipp.

30. *Asterina Crotonis* Syd., Ann. Mycol. XIV, 1916, p. 91. — Hypo- 4822
phylla, plagulas primo orbiculares dein plus minus confluentes et effusas irregulares tenues atro-griseas formans; mycelio haud copioso ex hyphis breviter ramosis copiose anastomosantibus fuscis 4,5-3 μ crassis septatis (articulis 15-20 μ longis) vix undulatis rectiusculis composito; hyphopodiis modice numerosis, alternantibus, continuis, sessilibus, plerumque modice lobatis, raro integris, 10-14 \times 7-9; thyriotheciis laxè gregariis, orbicularibus, 150-200 μ diam., ex hyphis olivaceo-brunneis 5-6 μ crassis (articulis 9-11 μ longis) rectis contextis, ad ambitum non vel vix fimbriatis, demum late apertis; ascis ovato-globosis, aparaphysatis, 45-50 \times 30-40, octosporis; sporidiis oblongis, levibus, fuscis, medio septatis et constrictis, 20-25 \times 9-12.

Hab. in foliis *Crotonis* sp. (Euphorbiaceae), Boraima, Brasiliae (E. ULE).

31. *Asterina Cassiae* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. 4823
of Sci. VIII (1913) p. 275. — Mycelio tenui, epiphylo, maculiformi vel plus minusve effuso, atro, ex hyphis tenuibus, dilute fuscis, dense ramosis, 3-4 μ cr., parce septatis (articulis longitudine variabilibus, mox 15-20 μ , mox multo longioribus) composito; hyphopodiis haud numerosis, plerumque alternis, rarissime oppositis, continuis, erectis, fuscis, saepe varie lobatis, 9-12 \times 4-5; peritheciis dense aggregatis, rotundatis, 100-140 μ diam., applanatis, stellatim dehiscens, tenuibus, contextu griseo-viridulo ex hyphis 2,5-3 μ crassis strato simplici radiato-contextis, peripherice subinde hyphis paucis flexuosis brevibus fimbriatis; ascis ovato-globosis, aparaphysatis, 26-34 \times 22-28, octosporis; sporidiis oblongis, utrinque rotundatis, medio-septatis, non vel leniter constrictis, levibus, 16-20 \times 6-7, ex hyalino fuscis, loculis aequalibus; pycnidiis similibus copiose praesentibus, minoribus, 70-90 μ diam., conidiis continuis, semper angulatis, obscure olivaceo-fuscis, subopacis, 12-14 μ diam.

Hab. in foliis vivis *Glochidionis lenosii* (Euphor-

biaceæ), non Cassiae timorensis, Luzon, Prov. Bataan, Limay, ins. Philipp. (P. W. GRAFF) — Cnfr. l. c. p. 490.

32. *Asterina lobulifera* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4824 p. 181. — Epiphylla, plagulas tenuissimas irregulares primitus minutas dein plus minus confluentes griseo-atras formans; mycelio ex hyphis rectis vel rectiusculis fuscis ramosis septatis 4-6 μ crassis composito; hyphopodiis numerosis, alternantibus, totis 10-16 μ longis, cellula basali plerumque brevissima vel usque ad 6 μ longa, cellula superiore grosse 2-4-lobata et 10-12 μ lata; peritheciis densiuscule dispositis, tenuibus, rotundatis, 100-140 μ diam., inversis, mox stellatim dehiscentibus, contextu ex hyphis obscure fuscis 3-3,5 μ crassis rectis crebre septatis (articulis 8-10 μ longis) regulariter strato simplici composito; ascis globosis aparaphysatis 25-30 μ longis, 20-25 μ latis, octosporis; sporidiis conglobatis, oblongis, utrinque rotundatis, medio 1-septatis parum constrictis, levibus, ex hyalino fuscis, 16-18 \times 7-8,5; pycnidiosporis simul praesentibus continuis, fuscis, centro zonula hyalina cinctis, 15-18 \times 8-10.

Hab. in foliis *Glochidionis* sp. (Euphorbiaceæ), Palawan, Taytay, Ins. Philipp. (MERRILL). — *Ast. lobatae* Syd. proxima.

33. *Asterina sphaeropoda* Syd., Ann. Mycol. XV, 1917, p. 242. — E- 4825
piphylla, plagulas parum perspicuas primo orbiculares 3-5 mm. latas sed mox confluentes tunc multo majores effusas formans, tandem totam folii superficiem vel magnam ejus partem occupans; mycelium rectangulariter ramosum, ex hyphis rectis fuscis 7-8,5 μ crassis septatis (articulis 25-35 μ longis) formatum; hyphopodia copiosa, continua, globosa, subinde hemisphaerica, semper integra, 10-12 μ alta et lata; thyriothecia densiuscule dispersa, plana, 160-200 μ diam., e singulo strato hypharum 3-3,5 μ crassarum dilute brunnearum peripheriam versus torulosarum in centro subrectarum vel flexuosarum septatarum (articulis 10-12 μ longis) radiatim contexta, membrana basali nulla, stellatim dehiscentia; asci ovato-oblongi, aparaphysati, 50-60 \times 30-35; sporae oblongae, medio septatae, vix vel leniter constrictae, brunneae, leves, 24-26 \times 10-13.

Hab. in foliis *Ostodis* sp. (Euphorbiaceæ), San Antonio Laguna, Ins. Philipp. (M. RAMOS).

34. *Asterina cylindrophora* Syd., Ann. Mycol. XV, 1917, p. 240. — Am- 4826
phigena. plerumque autem epiphylla, plagulas tennes arachnoideas primitus minutas mox confluyendo majores et irregulares formans mycelium ex hyphis rectis rectangulariter alterne vel opposite ramosis firmis obscure brunneis 7-8 μ crassis septatis (articulis 20-

30 μ longis) compositum, hyphopodia plerumque exacte opposita, saepius cylindracea, integra, 16-22 μ longa, 7-9 μ lata, bicellularia, cellula inferiore minutissima, patentia; thyriothecia sparsa, rotundata 160-250 μ diam., plana non fimbriata, stellatim dehiscencia, e strato singulo hypharum rectarum 2-3 μ crassarum septatarum (articulis 7-12 μ longis) obscure castaneo-brunnearum contexta; asci aparaphysati, ovato-globosi, perfecte evoluti non visi; sporae oblongo-ellipsoideae, utrinque rotundatae, medio vel circa medium septatae et valde constrictae, verruculosae, castaneo-brunneae, 34-36 \times 18-20, cellula inferiore plerumque minore.

Hab. in foliis *Scolopiae* sp. (Flacourtiaceae), Los Baños, Laguna Ins. Philipp. (U. F. BAKER).

35. *Asterina escharoides* Syd., Leaf. Philipp. Bot., IV, 1911, Art. 62, 4827 p. 1155. — Peritheciis amphigenis, irregulariter aggregatis, saepe in greges rotundatos 2-10 mm. latos dispositis, subinde etiam per magnam folii partem aequaliter vel irregulariter distributis, radiatum contextis, centro perforatis tenuibus, 100-175 μ diam., ambitu fibrillis 40-70 μ longis praeditis, atris, mycelio tenui parce evoluto, et hyphis 4-6 μ crassis ramosis septatis, hyphopodia minuta 6-9 μ longa gerentibus composito; ascis globosis vel subglobosis, 32-42 \times 30-35, octosporis; sporidiis conglobatis, ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, ex hyalino brunneis, verrucis lineatim dispositis distincte obsitis, 20-26 \times 11-14.

Hab. in foliis *Plateae apoensis* (Icacinaeae), et *Pittospori clementis* (Pittosporaceae), Todaya, ins. Apo, Distr. Davao, ins. Mindanao in Philipp. (ELMER).

36. *Asterina Litseae* H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 4828 1918, p. 373. — Amphigena, plerumque epiphylla, plagulas irregulares, plus minus totum folium occupantes obtecta; mycelio effuso, laxo, ex hyphis obscure fuscis 3,5-4,5 μ latis anastomosantibus radiantibus formato; ramis irregularibus; hyphopodiis numerosis, unicellularibus, 7-8 μ longis, 3-5 μ latis, irregulariter dispositis; peritheciis numerosissimis, gregariis, rotundatis, 100-140 μ diam., stellatim dehiscens, convexis, contextu ex hyphis brunneis 2-3 μ latis, ambitu brevibus radiantibus fimbriatis praedito; ascis paraphysatis, ovoideo-globosis, 28-32 \times 18-24, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, brunneis, laevibus, 15-17 \times 8-9.

Hab. in foliis *Litseae* (Lauraceae), Burgos, Prov. Norte, Luzon; Ins. Philipp. (RAMOS).

37 *Asterina Neolitseeae* H. S. Yates, The Philipp. Journ. of Sc. Bot., 4829

13., 1918, p. 374. — Epiphylla; plagulas suborbiculares, 4-10 mm. diam. vel confluentes, atras efformans; mycelio ex hyphis brunneis septatis 5-7 μ crassis longe articulatis (30 μ) anastomosantibus formato; hyphopodiis numerosis, alternantibus, bicellularibus; cellula superiore lobata, 15 μ lata; cellula inferiore 4-5 μ longa; peritheciis numerosis, rotundatis, 150-170 μ diam., applanatis, obscure brunneis, opacis; contextu ex hyphis 3-4 μ latis radiantibus composito, articulis 6-7 μ longis, ambitu fimbriatis; ascis ellipsoideis, octosporis, 60 \times 25-30, apophysatis; sporidiis oblongis, ellipsoideis, utrinque rotundatis, constrictis, fuscis, verruculosi, 44-46 \times 14-15.

Hab. in foliis *Neolitseeae* (Lauraceae), Prov. Abra, Mount Posney, Luzon, Ins. Philipp. (RAMOS).

38. *Asterina Verae-crucis* Theiss. in Sacc., Ann. Mycol. XII, 1914, p. 4830

300. — Mycelio plagas irregulares epiphyllas, confluentes, opace nigras efformante; hyphis radiantibus, rectis, olivaceo-brunneis, opposite ramosis, 6-7 μ cr., septis plus minusve distantibus; hyphopodiis alternis, continuis, hemisphaericis, integerrimis, 13-15 μ diam. concoloribus; peritheciis inversis semiglobosis, vertice radiatim fissis, contextu ex hyphis olivaceo-brunneis, radiatis, 5-6 μ cr., rectis (cellulis circ. 10 μ longis) margine non fimbriato; ascis apophysatis, ovoideo-piriformibus, dein late ellipsoideis, 66 \times 54, octosporis; sporidiis phaeodidymis, obscure brunneis, cellulis subaequilongis, ad septum constrictis, 30-35 \times 15-17.

Hab. in foliis subvivi *Laurineae* cujusdam (! *Litsaeae*), Veracruz, Mexico (S. BONANSEA). — Socia adest *Englerula mexicana* Theiss.

39. *Asterina trachycarpa* Syd. in Leaflets of Philipp. Bot. V (1912) 4831

p. 1542. — Mycelio hypophyllo, plagulas irregulares effusas indeterminatas, 3 mm. ad 3 cm. latas, subinde totam folii superficiem obtegentes efficientes, fusco-brunneo, ex hyphis tenuibus dense intertextis 3-4,5 μ cr., dilute brunneis, hyphopodiis destitutis vel hyphopodia rudimentaria tantum quasi ramos breves gerentibus composito; peritheciis irregulariter sparsis, inaequalibus, vix discoideis, sed plerumque varie angulatis, 125-180 μ longis, irregulariter radiatim contextis, centro mox fatiscentibus; ascis ovato-globosis vel ovatis, 30-40 \times 22-26, octosporis; sporidiis elliptico-oblongis, utrinque rotundatis, infra medium 1-septatis et valde constrictis, ubique verrucosis, fusco-brunneis, 20-25 \times 10-11, loculo superiore multo majore.

Hab. in foliis vetustis *Derridis atro-violaceae* (Leguminosae), Puerto Princesa, Palawan, ins. Philipp.

40. *Asterina singaporensis* Sydow, Ann. Mycol. 18., 1920, p. 159. — 4832

Epiphylla, plagulas tenues orbiculares 2-5 mm. diam. formans; mycelium laxum, ex hyphis rectis brunneis 3-4 μ crassis rectangulariter ramosis compositum; hyphopodia modice copiosa, hinc inde dispersa, raro opposita cylindracea vel subcylindracea, continua, integra, 10-15 μ longa, ca. 4-4,5 μ crassa; thyriothecia dense gregaria, regularia, semper orbicularia, 80-110 μ diam., ad ambitum fimbriata, regulariter ex hyphis fusciculis semper rectis 3-4 μ crassis contexta; asci ovato-globosi, ut videtur aparaphysati, 8-spori, 30-40 \times 20-24; sporae ellipsoideo-oblongae, medio vel circa medium 1-septatae, ex hyalino fuscae, 16-20 \times 6-8, loculis leniter inaequalibus.

Hab. in foliis *Derridis sinuatae* (Leguminosae), Singapore, Straits Settlements, Asiae (C. F. BAKER).

41. *Asterina Holocalycis* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4833

Buenos Aires XXIII (1912) p. 81. — Plagulis saepius epiphyllis, discoideis, subcrustaceis, arcte adnatis, 0,5-2 mm. diam., nigris; subiculo parvissimo, hyphis flexuosis, alterne ramosis, fuliginosis, laxe septulatis, 5-6 μ cr., hyphopodiis paucis, alternis, sessilibus, subglobosis, 12-15 μ diam., verruculosi; peritheciis centro plagularum dense constipatis, dimidiato-scutatis, 100-150 μ diam., contextu parenchymatico-sinuoso, radiante, fuligineo, ostiolo circulari obsoleto pertusis; ascis ellipsoideis, apice crasse tunicatis, basi cuneato-attenuatis, 50 \times 25-30, filiformi-paraphysatis; sporidiis tristichis, cylindraceo-ellipsoideis, obtusis, ad septum non vel leniter constrictis, loculo infero nonnihil longiore, primo hyalinis dein fuliginosis, 22-26 \times 8-10.

Hab. ad folia viva *Holocalycis Balansae* (Leguminosae), in silvis prope Puerto Leon, Misiones, Argentina.

42. *Asterina (Clypeolaster) loranthicola* H. et P. Sydow, Ann. Mycol. XII, 4834

1914, p. 266. — Amphigena, plagulas primitus rotundatas minutas 1-3 mm. diam. dein saepe confluentes formans; mycelio laxo, ex hyphis rectis vel fere rectis brunneis 4-6 μ crassis laxè irregulariterque ramosis composito; hyphopodiis haud numerosis, alternantibus, sessilibus, continuis, cylindrico-obovatis, saepe uncinatis, 9-11 μ altis, 5-6 μ latis, thyriotheciis dense aggregatis, semper orbicularibus, applaunato-hemisphaericis, 100-160 μ diam., contextu ex hyphis rectis crebre septatis 3,5-5 μ latis in articulos cubicos

v. param elongatos (usque 7 μ longos) divisus composito, peripherice sat copiose fimbriatis, facile in sectores secedentibus; ascis aparaphysatis, ovato globosis, octosporis, 30-38 \times 24-30; sporidiis ellipsoideo-oblongis, medio septatis et constrictis, utrinque rotundatis, ex hyalino brunneis, 20-24 \times 8-11, levibus, cellula superiore saepe leniter latiore; thyriotheciis conidiiferis minoribus; conidiis elliptico-piriformibus, continuis v. medio spurie septatis, brunneis, 15-22 \times 9-11.

Hab. in foliis *Loranthi* sp. (Loranthaceae), Quelimane, Africa or. lusitana (J. B. EVANS). — *Ast. consociatae, congestae, Büttneriae* proxima sed differt praecipue hyphis mycelicis validioribus.

43. *Asterina Phoradendri* P. Henn., Hedw. v. 48 (1908) p. 12. — Ma. 4835
culis mycelii amphigenis, rotundatis, atris, hyphis repentibus, atrofusis, septatis, 3 μ circ. crassis; peritheciis sparsis vel aggregatis, dimidiato-septatis, celluloso-radiatis; ascis ovoideis vel ellipsoideis, apice rotundato-tunicatis, 4-8-sporis, paraphysatis, 50-95 \times 40-50; sporidiis ovoideis, medio septatis, constrictis, atris, 30-40 \times 20-24.

Hab. in foliis *Phoradendri lanceolato-elliptici* (Loranthaceae), Morro Pellado, S. Paulo, Brasilia.

44. *Asterina confertissima* Syd., Ann. Mycol. XIV, 1916, p. 90. — E. 4836
piphylla, plagulas distincte orbiculares 1-3 mm. diam. non vel vix confluentes maculiformes atras formans; mycelio modice evoluto, laxo, radiante, ex hyphis fuscis irregulariter ramosis 5-6 μ crassis flexuoso-curvatis remote septatis (articulis usque 50 μ longis) composito; hyphopodiis modice numerosis, alternantibus, sessilibus, continuis, ovato-globosis, late conicis usque ovato-oblongis, 10-16 μ longis, 6-9 μ latis, integris, raro lenissime lobulatis; thyriotheciis densissime stipatis, rotundatis, 120-160 μ diam., irregulariter stellatim dehiscentibus, tandem latiuscule apertis, contextu opaco ex hyphis obscure olivaceis dense flexuosis vel fere submaeandrice curvatis usque ad centrum serratis vel dentatis, 3,5-4 μ crassis (articulis 10-12 μ longis) composito, ad ambitum hyphis similibus fimbriatis. Ascis aparaphysatis, ovatis vel ovato-oblongis, apice rotundatis, crasse tunicatis 35-50 \times 18-26, octosporis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et parum vel leniter constrictis, levibus, fuscidulis, 17-20 \times 8-10.

Hab. in foliis *Arthrostemmatidis campanularis* (Melastomataceae), Serravallo S. Francisco Rio Acre, Brasilia (E. ULE).

45. *Asterina Astroniae* H. S. Yates, Philipp. Journ. Sc. Manila, XII 4837

(1917) p. 370. — Epiphylla; plagulis suborbicularibus vel irregularibus, 4-8 mm. diam., saepe confluentibus, atris, mycelio ex hyphis paucis brunneis septatis anastomosantibus irregulariter ramosis 3-4 μ latis composito; hyphopodiis unicellularibus, paucis, irregulariter distributis, ovoideis, elongatis integris vel lobatis, 5-6 μ longis, 4-6 μ latis; peritheciis numerosis in quaque macula, suborbicularibus, applanatis, 160-200 μ diam., irregulariter dehiscens, contextu radiatim, ex hyphis obscure brunneis 2-4 μ diam. composito, ambitu vix fimbriato; ascis subglobosis vel ovoides, 45-55 \times 28-35, octosporis, paraphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, ad medio 1-septatis, constrictis, fuscis, 18-28 \times 10-12.

Hab. in foliis *Astroniae* sp. (Melastomataceae), Catubing River Samar, Ins. Philipp. (RAMOS).

46. *Asterina transiens* Theiss., Gatt. Asterina, p. 42, tab. VI fig. 29-30 4838

et VIII fig. 6 (1913). — Epiphylla; mycelio radiante soros minutos dense super folium sparsos sistente; hyphis rectis, opposite vel alterne ramosis, reticulatis, 3,5-5 μ crassis, late fusco-olivaceis; hyphopodiis alternis, cylindraneo-conicis, integris, 6-10 \times 4 (rarius depressis, 4-5 \times 5-8, subsinuatis); peritheciis paucis in centro mycelii aggregatis, 150-220 μ diam., orbicularibus vel ellipticis, usque ad 250-340 \times 170-220 (rarius linearibus usque ad 450 \times 120), stellatim vel rima lineari dehiscens, ex hyphis angustis, 3-4 μ crassis, brunneis opacissime contextis, margine fuscido subpellucido subcrenulatoque; ascis nunc ellipsoideis, 32-40 \times 22 et sporidiis tristichis vel conglobatis, nunc oblongis, usque ad 50 \times 18 et sporidiis distichis, jodi ope leniter coerulescentibus, saltem juventute, paraphysibus hyalinis flexuosis simplicibus obvallatis, octosporis; sporidiis 17-19 \times 6-8, utrinque rotundatis, brunneis, constrictis, cellula superiore plerumque globosa, inferiore cylindracea.

Hab. in foliis *Miconiae Candolleanae* (Melastomataceae), in Brasilia. — Ad *Lembosiam* vergens.

47. *Asterina Miconiae* Theiss., Ann. Mycol. XI, 1913, p. 440. — My- 4839

celio dense reticulato, hyphis rectis, saepe torulosis, brunneis 3,5-4 μ cr., alterne ramosis; hyphopodiis alternis, continuis, breviter cylindraceis vel subglobosis, 6-7 \times 5. Thyriothechia inversa, dimidiata, hemisphaerica stellatim dehiscens, 150-200 μ diam., hyphis brunneis 4 μ crassis opace radiatim contexta, peripherice hyphis rectilineis torulosis densiuscule fimbriata, membrana basilari destituta. Asci paraphysati elliptico-clavati, 50 \times 22-28, octospori. Sporae brun-

neae, 20-25 × 9-11, utrinque rotundatae, cellulis subaequalibus.

Hab. in foliis *Miconiae* sp. (Melastomataceae), Sao Paulo, Brasiliae.

48. *Asterina incisa* Syd. in Syd. et Butler, Ann. Mycol. IX, 1911, 4840 p. 390. — Peritheciis epiphyllis, quoad formam variabilibus, rotundatis, ellipticis v. saepissime oblongis aut elongatis (*Lembosiae* ad instar) et tunc ut plurimum confluentibus, quasi profunde lobatis (lobis circ. 100-175 μ latis rima longa subhysterioidea v. irregulari dehiscentibus), atris, 300-500 μ longis, contextu opaco indistincte radiato, ambitu hyphis plus minus radiantibus ramosis anastomosantibus 4-7 μ cr., hyphopodia pauca gerentibus cinctis; ascis ovatis usque clavatis, apice valde incrassatis, 38-54 × 26-30, paraphysatis, octosporis; sporidiis conglobatis, ellipsoideis v. oblongo-ellipsoideis, utrinque rotundatis, medio septatis et constrictis, ex hyalino brunneis, levibus, 17-20 × 8-9.

Hab. in foliis *Weberae corymbosae* (Melastomataceae), Balehonnur, Mysore Indiae or. (E. J. BUTLER).

49. *Asterina Maublancii* (Arnaud) A. Maublanc, Bull. Soc. Mycol. de Fr. t. 36., 1920, p. 38, fig. 1-2, *A. Melastomatis* Lév. var. *Maublancii* Arnaud, Ann. Ecole nat. Agricult. Montpellier, t. 16., 1918, p. 169, fig. 21. — Maculis amphigenis (praecipue epiphyllis), sparsis, 2-5 mm. diam., rotundatis, nigris; hyphis repentibus, reticulatis, 7-8 μ crassis, septatis; hyphopodiis simplicibus, ovoideis vel piriformibus, sessilibus. Peritheciis orbicularibus, gregariis, saepissime confluentibus, elongatis vel trigonis, carbonaceis, nigris, pariete crassa, margine vix fimbriata. Ascis ovoideis, crasse tunicatis, paraphysatis, 8-sp., 65-82 × 38-48; sporidiis conglobatis, ellipticis vel fere piriformibus, medio 1-septatis constrictisque; loculis subaequalibus vel inferiore paulum angustiore, brunneis, 30-35 × 12-16.

Hab. in foliis vivis *Melastomataceae* ejusdam. Alto de Boe Vista, p. Rio-de-Janeiro, Brasiliae.

50. *Asterina Cipadessae* H. S. Yates, Philipp. Journ. Sc. Manila XII 4842 (1917) p. 371. — Epiphylla; maculis atris primo orbicularibus, 2-4 mm. diam., mox confluentibus et plus minusve totam superficiem folii obtegentibus; mycelio ex hyphis brunneis ramosis anastomosantibus 3-4 μ cr. composito, hyphopodiis numerosis, plerumque oppositis vel etiam alternantibus, irregulariter 2-4 lobatis, 7-10 μ longis; peritheciis numerosis, 150-250 diam., obscure brunneis subopacis vel opacis, rotundatis vel ellipsoideis, irregulariter dehiscentibus, contextu ex hyphis septatis radiatis 5-7 μ latis composito,

marginē vix fimbriatis; ascis ovatis, 35-45 × 22-27, octosporis, paraphysatis; sporidiis oblongis, utrinque rotundatis, ad medium 1-septatis, constrictis, obscure brunneis, papillatis, 28-32 × 10-12.

Hab. in foliis *Cipadessa* (Meliaceae), Kolinge, Luzon Ins. Philipp.

51. *Asterina opposita* Syd. in Leaflets of Philipp. Bot. VI (1913), p. 4843

1926. — Epiphylla, maculas atras circulares 2-10 mm. latas efformans; mycelio ex hyphis dense intertextis, ramosis, septatis, 4,5-6,5 μ latis, atro-brunneis, opacis composito; hyphopodiis numerosissimis, plerumque perfecte oppositis, continuis, obtusis, opace fuscis, 10-14 × 4,5-6; peritheciis ambitu circularibus, 120-175 μ diam., contextu ex hyphis amoene radiantibus, 2-2,5 μ crassis, strato simplici composito, subpellucidis, fuscidulis; ascis globosis, subglobosis vel ovatis, 42-52 × 30-40, octosporis, aparaphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis et leniter constrictis, levibus, primo hyalinis dein brunneis, 24-28 × 12-14.

Hab. in foliis *Meliaceae* cujusdam, Cabadbaran, Mindanao, ins. Philipp. — *A. Elmeri* Syd. cognata sed notis variis distincta.

52. *Asterina mandaquiensis* P. Henn., Hedw. vol. 48 (1908) p. 12. — 4844

Maculis mycelii epiphyllis, effusis, atro-crustaceis; hyphis fuscis, ramosis, 2-3,5 μ crassis, conidiis fusoides, medio 1-septatis, hyalino-fuscidulis, 10-18 × 2,5-3; peritheciis sparsis vel gregariis, dimidiato-scutatis, radiato-cellulosis, 200-250 μ diam.; ascis ovoideis, apice tunicatis, octosporis, 35 50 × 20-30; sporidiis ovoides vel ellipsoideis, obtusis, medio septatis, paulo constrictis, atro-fuscis, 20-25 × 8-10.

Hab. in foliis *Eugeniae uniflorae* (Myrtaceae), Mandaqui, Serra Cantareira, S. Paulo, Brasiliae.

53. *Asterina Eugeniae* H. S. Yates, Philipp. Journ. Sc. XII (1912) p. 4845

371. — Hypophylla, maculas saepe marginales, usque 10 mm. diam., orbiculares vel irregulares; mycelio ex hyphis paucis effusis laxis septatis obscure brunneis ramosis anastomosantibus 4-6 μ crassis composito; hyphopodiis paucis alternantibus vel irregularibus, cylindraceis, rotundatis, 10-12 × 6; peritheciis numerosis, applanatis, atris opacis, 225-275 μ diam., centro perforatis, contextu ex hyphis radiantibus 3-5 μ latis composito; ascis oblongo-ovatis, paraphysatis, octosporis, 50 60 × 20-22; sporidiis oblongis, utrinque rotundatis, 1-septatis, ad septa constrictis, hyalis, 20 × 5 (immaturis), loculo superiore majore.

Hab. in foliis *Eugeniae* sp. (Myrtaceae), Botangas, Luzon,

Ins. Philipp. (RAMOS et DEROT).

54. *Asterina ditissima* Syd., Ann. Mycol. XV, 1917, p. 243. — Plerum- 4846
que epiphylla, primitus plagulas minutas orbiculares dein confluen-
tes formans et tandem totam folii superficiem obtegens; mycelium
ex hyphis rectangulariter ramosis septatis (articulis 15-25 μ longis
5-6,5 μ crassis) obscure castaneis compositum; hyphopodia copio-
sissima, alternantia, continua, subhemisphaerica vel brevissime
crasseque cylindracea, 9-12 μ alta, 8-10 μ lata; thyriothechia dense
disposita, orbicularia, 200-320 μ diam., convexula, radiatim ex hy-
phis rectiusculis ca. 3 μ crassis composita, contextu opaco; asci
oblongi, 50-64 \times 20-28, octospori, apapophysati; sporae ellipsoideo-
oblongae, medio vel paullo infra medium septatae, non vel vix
constrictae, fuligineae, eves, 22-25 \times 10-12.

Hab. in foliis *Eugeniae* sp. (Myrtaceae), Mt. Capoas, Pala-
wan, Ins. Philipp. (E. D. MERRILL).

55. *Asterina quarta* Racib. ap. Theiss., Gatt. Asterina, p. 77, tab. I 4847
fig. 9, IV fig. 10 et V fig. 20 (1913). — Epi-rarius hypophylla; hy-
phis 5-8 μ crassis, castaneo-brunneis, cellulis 12-16 μ longis; hy-
phopodiis cylindricis, integris, btusis, rarissime breviter pedicel-
latis, 12-15 \times 6-8; peritheciis 100-300 μ diam. ex hyphis 4 μ cr.
opacissime contextis, peripherice hyphis valide crenulatis, laxe sep-
tatis fimbriatis, stellatim dehiscentibus; ascis apapophysatis, ovatis,
late tunicatis, octosporis, jodo coerulescentibus, 75-85 \times 30-40; spo-
ridiis brunneis, 20-22 \times 11-14, laevibus, loculo supero latiore, infero
angustato.

Hab. in foliis *Syzygii jambolani* (Myrtaceae), Bui-
tenzorg, Java.

56. *Asterina Rickii* Theiss., Gatt. Asterina, p. 69, tab. IV fig. 5 et V 4848
fig. 17 a, 18 a (1913) — *Seynesia? paraguayensis* Theiss., Dec. Fung.
Bras. 68. — Mycelio laxo, amphigeno, imprimis epiphylo; hyphis
gracilibus, 3,5-4,5 μ crassis, oppositae, rarius alternae ramosis, rectis,
fuligineo-brunneolis, laxae septatis (cellulis 24-28 μ longis); hypho-
podiis anguste cylindraceo-conicis, unicellularibus, integris, rectis,
alternis, 10-13 μ longis, basi 4,5-5,5 μ crassis; peritheciis primo
discoideis, papillatis, dein conice elevatis, demum hemisphaericis,
100-150 μ diam., stellatim dehiscentibus, demum usque ad margi-
nem resolutis, laxae gregariis, ex hyphis brunneis, recto-radiantibus,
4,5-5 μ crassis (septis firmis, obscuris, 5,5-6,5 μ distantibus) con-
textis, peripherice hyphis griseis vix septatis tenuioribus 3 μ cr.
leniter flexuoso-torulosis fimbriatis; ascis globosis 35-40 μ vel ovatis

38 \times 30 vel ellipsoideis 50 \times 32, aparaphysatis, jodo non coerulescentibus, octosporis; sporidiis conglobatis, 18-22 \times 8-9, rotundatis, levibus, constrictis, brunneis, loculo supero parum latiore.

Hab. in foliis *Myrtaceae* ejusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia. — Ab *A. ampullulipeda* et *A. huallagensi* hyphopodiis tenuioribus, conicis sporidiisque minoribus differt.

57. *Asterina serrensis* P. Henn., Hedw. vol. 48, 1908, p. 12. — Maculis 4849 mycelii epiphyllis, fusciculis; hyphis fuscis, ramosis; peritheciis sparse gregariis, dimidiato-scutatis, radiato-cellulosis, 250-300 μ diam.; ascis clavatis, apice rotundatis crasseque tunicatis, octosporis, 80-110 \times 20; sporidiis conglobatis, ovoideis, rotundatis, medio septatis, constrictis, cellula superiore granulatis, atro-fuscis, 20-26 \times 8-10.

Hab. in foliis *Myrtaceae*, Alto da Serra, S. Paulo Brasilia.

58. *Asterina oligocarpa* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4850 558. — Hypophylla plagulas effusas confluentes formans; mycelio laxo, ex hyphis rectis rectangulariter ramosis fuscis crebre septatis 6-7 μ crassis composito; hyphopodiis modice numerosis, cylindraceis, obtusis, rarius irregularibus, continuis, 8-14 μ longis, 6-8 μ latis, alternantibus; thyriotheciis dense gregariis, exiguis, rotundatis, 50-70 μ diam., fuligineis, ex hyphis 4-5 μ crassis crebre septatis (articulis 4-5 μ tantum longis) uno strato compositis, mox latissime apertis; ascis paucis (2-5) in quoque thyriothecio, ovatoglobosis, aparaphysatis, 40-45 μ longis, 30-35 μ latis, 4-8-sporis; sporidiis oblongo-ellipsoideis, utrinque obtusis, medio septatis et valde constrictis, verrucosis, in maturitate opace fuscis, 20-25 μ longis 10-11 μ latis, loculis fere aequalibus vel supero parum majore; thyriotheciis conidigeris similibus; conidiis piriformibus, continuis, opace fuscis, 22-24 μ longis, 15-18 μ latis.

Hab. in foliis *Olacis imbricatae* (Olacaceae), Angat pr. Bulacan, et prov. Rizal, Ins. Philippin. (M. Ramos).

59. *Asterina crebra* H. Sydow, Ann. Mycol. XI, 1913, p. 327. — Ma- 4851 culas atras amphigenas primo orbiculares minutas 1-3 mm. latas tandem plus minus confluentes et per totam folii superficiem dispositas efformans; mycelio ex hyphis ramosis septatis (articulis 9-15 μ long.) fuscis 5,5-7 μ latis contexto, hyphopodiis continuis, breviter cylindraceis, regularibus, alternantibus, haud numerosis, 8-13 μ long., 4,5-6 μ latis, apice obtusis; peritheciis dimidiato-scutatis, amoene radiatim contextis, stellatim dehiscentibus, 90-125 μ

diam., ex hyphis strato simplici ordinatis ca. $4\ \mu$ latis fuscis contextis; ascis ovatis, aparaphysatis, $27-38 \times 20-30$, octosporis; sporidiis ellipsoideis verrucosis, in maturitate brunneis, ad septum constrictis, $18-22 \times 7-9$; pycnidiiis numerosis simul praesentibus, $80-110\ \mu$ diam.; sporulis continuis, ovatis, fuscis, $15-20 \times 10-13$.

Hab. in foliis *Opiliae amentaceae* Roxb. (Olacaceae), Bolampatty valley Coimbatore, Madras Pres. (C. E. C. FISCHER).

60. *Asterina spissa* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 4352 392. — Peritheciis epiphyllis, hinc inde maculiformiter aggregatis v. saepe per totum folium plus minus aequè distributis, radiatim contextis, $130-170\ \mu$ diam., stellatim dehiscen- tibus, mycelio parco ex hyphis $4-5\ \mu$ cr. composito insidentibus, hyphopodiis ut videtur nullis, ascis ovatis v. ovato-globosis, octosporis, $38-45 \times 30-35$; sporidiis ellipsoideis v. ellipsoideo-oblongis, utrinque rotundatis, medio septatis et constrictis, brunneis, distincte verrucosis, $20-24 \times 9-12$.

Hab. in foliis *Jasmini* sp. (Oleaceae), Chittagong, Indiae or. (E. J. BUTLER).

61. *Asterina jasminicola* H. S. Yates, The Philipp. Journ. of Sc., Bot. 4853 13., 1918, p. 373. — Peritheciis amphigenis hinc inde maculiformiter aggregatis vel saepe per totum folium plus minusve aequè distributis, maculis $2-6\ \text{mm.}$ diam.; mycelio ex hyphis brunneis $4-5\ \mu$ diam. tortuosis composito; hyphopodiis numerosis bicellularibus, irregulariter distributis nunquam oppositis; cellula superiore irregulariter angulata et lobata, $8-10\ \mu$ diam., inferiore $5,5-6,5 \times 4-4,5$; peritheciis numerosis, globosis, atris, opacis, irregulariter dehiscen- tibus; ascis globosis, $22-26\ \mu$ diam., octosporis, paraphysatis; sporidiis medio 1-septatis, brunneis, verrucosis, ellipsoideo-oblongis, utrinque rotundatis, $17-19 \times 8-10$.

Hab. in foliis *Jasmini* (Oleaceae), Burgos, Prov. Llocos Norte, Luzon, Ins. Philippin. (RAMOS).

62. *Asterina Liparidis* Rac. ap. Theiss., Gatt. Asterina (1913) p. 91, 4854 tab. VI fig. 37. — Amphigena; subiculo plus minusve dense reticulato, hyphis irregulariter nunc laxè nunc dense ramosis, flexuosis, saepe fortiter undulatis, $4-5,5\ \mu$ cr. brunneis; hyphopodiis alternis, sessilibus vel erectis, semper tamen unicellularibus, varie lobatis, $7-10\ \mu$ longis et latis; peritheciis congregatis, applanatis, $150-220\ \mu$ diam. vel ellipsoideis 250×150 , centro umbilicatis et irregulariter dehiscen- tibus, ex hyphis obscure brunneis $4\ \mu$ cr., rectis (cellulis $6-8\ \mu$ longis) opace contextis, non fimbriatis; ascis ovatis, aparaphysatis, jodo obsolete cyanescentibus, $4-8$ -sporis, $30-38 \times$

25-30; sporidiis (nondum plene maturis) 19-22 \times 8-10, utrinque rotundatis, fusco-brunneolis (episporio tenuiter verrucoso?), loculo supero plerumque latiore. — Conidiis (*Asterostomellae*) late ovatis, 18-25 \times 13-16, atro-violaceis, medio hyalino-cinctis

Hab. in foliis *Liparidis* sp. (Orchidaceae), Gedeh, Java.

63. *Asterina Bakeri* Syd., Ann. Mycol. XIV, 1916, p. 367. — Epiphylla, 4855

primitus plagulas tenues orbiculares 0,5-1 cm. diam. formans, tandem plagulis plus minusve confluentibus, totam folii superficiem, vel magnam ejus partem plus minus aequaliter obtgens; mycelio ex hyphis longiusculis sat copiose rectangulariter vel fere rectangulariter et opposite ramosis 3-5 μ crassis fumoso-fuscis rectiusculis septatis (articulis 10-16 μ longis) composito; hyphopodiis propriis nullis, sed nodulis praesentibus; nodulis hypharum copiosis, plerumque leniter, elongatis, rarius subglobosis, 6-8 μ latis; thyriotheciis convexis, plerumque ambitu orbicularibus, 300-350 μ diam., ex hyphis rectis fusco-brunneis 3-4 μ crassis septatis (articulis 8-10 μ marginem versus usque 15 μ longis) compositis, ad ambitum copiose fimbriatis, rima dehiscentibus; ascis ovatis, 50-70 \times 30-40 singulis elongatis, 8-sporis, J-; paraphysibus genuinis nullis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio constrictis, ex hyalino fuscis, in maturitate dense distincteque verrucosis, 26-36 \times 12-14, loculis fere aequalibus vel superiore leniter majore.

Hab. in foliis *Daeemonoropis* (Palmae), Los Baños ins. Philipp. (S. A. REYES).

64. *Asterina transversalis* Syd. in Leaflets of Philipp. Bot. V (1912) 4856

p. 1542. — Mycelio epiphylllo, effuso, tenui, maculas discoideas vel irregulares, magnas, 0,5-1,5 cm. latas, confluyendo saepe majores efformante, ex hyphis longiusculis ramosis laxè intertextis, 5-7 μ cr., fuscis, saepe noduloso-incrassatis composito; nodulis hypharum plus minusve protuberantibus, utrinque v. rarius ad unum latus hypharum hemisphaerico-prominulis, vel etiam magis exsertis, tunc irregulariter cylindraceis, usque ad 10 μ longis, 3-4 μ crassis, ex hyphopodia continua constituentibus; peritheciis in mycelio densiuscule aggregatis, sed sine ordine dispositis, mox in directione nervorum folii ordinatis, mox et saepius autem vario modo nervos transgredientibus, elongatis, angustis, minoribus 175-300 μ longis, majoribus fere usque ad 1 mm elongatis, radiatim contextis, rima longitudinali irregulariter dehiscentibus, quasi lembosioideis, atris, radiantibus 3-6 μ crassis cinctis; ascis ovato-globosis, 50-60 \times 40-50, octosporis; sporidiis oblongis, utrinque rotundatis, medio 1-septa-

tis, leniter constrictis, minute verruculosus, ex hyalino brunneis, 38-44 \times 16-20.

Hab. in foliis *Palmae* cujusdam scandentis, Puerto Princessa, Palawan, ins. Philipp. — Species pulchra, perdistincta.

65. *Asterina perconferata* Trott. n. nov., *Aster. confertissima* Spegaz., 4857
Fungi Costarie. nonn. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 210, cum icon., non Sydow 1916. — Hypophylla, rarius epiphylla; subiculum parcissimum, hyphopodiis bi-v. trilobis alternis (8 \times 10-12) praeditum; thyriothecia confertissima (5-10) subconfluentia saepius plagulas latiusculas subcrustaceas efficientia, membrana hypoasca destituta, astoma, discoidea, 80-120 μ lat., centro stellatim dehiscencia, atra, glabra, subopaca, medio subparenchymatica, ambitu fibroso-radiantia, margine parcissime denticulato-fimbriata; asci obovati aparaphysati superne crasse tunicati inferne brevissime crasseque pedicellati, octospori, 38-40 \times 25-30; sporae didymae ad septum constrictulae, cellula supera subglobosa (9 \times 9) et infera fere obovata parum angustiore ac longiore, fuligineae laeves, 13-20 μ long.

Hab. in foliis vivis *Passiflorae* (Passifloraceae) ignotae, prope S. José Costarica, America trop. — Ab *Ast. consociata* Mut. et *megalospora* in Passifloris etiam vigentibus diversa.

66. *Asterina piperina* Syd., Ann. Mycol. XV, 1917, p. 243. — Epiphylla, 4858
plagulas minutas parum perspicuas formans; mycelium latum, ramosum, parce evolutum, ex hyphis flexuosis anastomosantibus remote septatis fusco-olivaceis 3-5 μ crassis compositum; hyphopodia dispersa, bicellularia, 7-12 μ longa, cellula basali minuta, stipitiformi, cellula superiore angulata leniter lobata vel recurvata, rarius integra, 6-10 μ lata; thyriothecia gregaria, rotundata, 120-150 μ diam., e strato simplici hypharum subrectarum 2; 2,5 μ crassarum subrectarum olivaceo-fuscarum contexta; asci ovato-globosi, aparaphysati 26-35 \times 20-26, octospori; sporidia oblonga, utrinque rotundata, medio septata leniter constricta, 16-19 \times 8-9, leves, brunneae, conidia simul praesentia continua, ovoidea, medio zonula angusta hyalina cincta, 12-15 \times 9-10.

Hab. in foliis *Piperis* sp. (aff. *P. Betle*) (Piperaceae), Kalinga Luzon, Ins. Philipp. (H. S. YATES).

67. *Asterina Piperis* H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 4859
1918, p. 374. — Mycelio epiphylo, parce evolutum, tenue, laxo, efuso, ex hyphis brunneis 4 μ crassis formato; hyphopodiis alternantibus vel irregularibus, 2-cellularibus, cellula superiore irre-

gulariter lobata, 6-8 μ longa, 4-5 μ lata, cellula inferiore, 4-5 μ longa; peritheciis numerosis, applanatis, rotundatis, brunneis, stellatim dehiscens, 115-130 μ diam., contextu ex hyphis fuscis 2-3 μ crassis composito, ambitu parum fimbriato; ascis globosis vel subglobosis, aparthysatis, 25 \times 20, octosporis; sporidiis conglobatis, oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, fuscis, laevibus, 15-18 \times 7-8.

Hab. in foliis *Piperis* sp. (Piperaceae), Bangui, Prov. Llocos Norte, Luzon, Ins. Philipp. (RAMOS).

- 68 *Asterina densa* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 557. — 4860

Hypophylla, plagulas effusas saepe confluentes 0,5-2 cm. (vel ultra) longas aterrimas formans; mycelio densissimo ex hyphis valde ramosis obscure brunneis 4-5,5 μ crassis composito; thyriotheciis dense dispositis, carbonaceis, rotundatis, usque ellipsoideis, 140-170 μ diam., ambitu non fimbriatis, radiatim ex hyphis obscure castaneo-brunneis subrectis v. leniter flexuosis 3-3,5 μ latis crebre septatis (articulis 6-9 μ longis) contextis; ascis ovato-globosis, 40-55 \times 35-40, aparthysatis, octosporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, constrictis, ex hyalino fuscis, levibus, 24-26 \times 9-10, loculo supero subinde leniter majore.

Hab. in foliis *Pittospori pentandri* (Pittosporaceae), prope Angat, prov. Bulacan, Ins. Philippin. (M. RAMOS).

69. *Asterina Zizyphiae* H. S. Yates, The Philipp. Journ. of Sc., Bot., 4861

13., 1918, p. 375. — Amphigena; plagulas effusas, 2-5 mm. diam., saepe confluentes et totum folium plus minus occupantes efformans; mycelio ex hyphis brunneis anastomosantibus 6 μ crassis remote septatis (articulis 20-25 μ longis) ramosis composito; hyphopodiis irregularibus, unicellularibus, globosis, 10 μ diam.; peritheciis paucis, rotundatis, 120-170 μ diam., brunneis, ambitu non fimbriato, contextu radiatim ex hyphis brunneis leviter flexuosis 2-4 μ crassis composito; ascis octosporis, ovato-globosis, 40 \times 30, aparthysatis; sporidiis (immaturis) oblongo-ellipsoideis, utrinque rotundatis, medio 1-septatis, constrictis, laevibus, hyalinis, 15 \times 10.

Hab. in foliis *Zizyphi* (Rhamnaceae), Mount Tulaog Prov. Tayabas Luzon, Ins. Philipp. (RAMOS et EDAÑO).

70. *Asterina nodulifera* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4862

p. 180. — Amphigena, saepius epiphylla, plagulas minutas 2-4 mm. diam. opacas formans; mycelio radiante, ex hyphis rectiusculis opposito-vel alternatim ramosis obscure brunneis opacis 6-10 μ latis non hyphopodiatis sed regulariter globoso-nodulosus (nodos 10-15 μ

crassis) composito; peritheciis inversis, in centro plagularum laxè dispositis, rotundatis, 250-340 μ diam., plano-conoideis, tandem stelatim dehiscentibus, radiatim contextis; ex hyphis brunneis subrectis vel flexuosis 3-4 μ crassis (articulis 10-14 μ longis) compositis; ascis globulosis usque ovatis, 40-55 \times 38-44, paraphysatis; sporidiis octonis, oblongis, utrinque late rotundatis, ad septum non vel vix constrictis, totis 30-35 μ longis, levibus, ex hyalino brunneis, cellula superiore globosa 11-13 μ diam., inferiore cylindracea 20-24 \times 10-12.

Hab. in foliis *Angelesiae splendens* (Rosaceae), Palawan Taytay, Ins. Philipp. (MERRILL).

71. *Asterina Canthii* H. S. Yates, The Philipp. Journ. of Sc. 13., Bot., 4863 1918, p. 372. — Amphigena; maculas crustaceas, atras, irregulares, 5-6 mm. diam.; mycelio abundante, ad superficiem foliorum adpresso, ex hyphis anastomosantibus obscure brunneis 6-8 μ crassis formato; ramis oppositis vel alternantibus; hyphopodiis numerosissimis, oppositis, unicellularibus, oblongo-cylindraceis, apice rotundatis, 4-5 \times 5; peritheciis rotundatis; atris, opacis, ambitu fimbriatis, 90-175 μ diam.: contextu subparenchymatico, irregulariter dehiscentibus; ascis oblongo-cylindraceis, 30-40 \times 8-10, paraphysatis, octosporis; sporidiis medio 1-septatis et constrictis, brunneis, utrinque subacutis, 10-12 \times 3-3,5.

Hab. in foliis *Canthii* (Rubiaceae), Burgos, Prov. Llocos Norte, Luzon, Ins. Philippin. (RAMOS).

72. *Asterina platypoda* Syd., Ann. Mycol. XV, 1917, p. 241. — Epiphylla, 4864 plagulas tenues orbiculares ca. 1 cm. latas dein confluentes et plus minus effusas formans; mycelium laxum, rectangulariter ramosum, ex hyphis obscure brunneis rectiusculis vel irregulariter flexuosis septatis (articulis longiusculis) compositum, hyphopodia semper solitaria, parce evoluta, continua; plerumque conoidea, lata basi sessilia; rarius crasse cylindracea, 18-20 μ alta, basi 12-14 μ lata, thyriothecia laxè gregaria, plana, orbicularia, 250-350 μ diam., ex uno strato hypharum rectarum dilute brunnearum 3,5-4 μ crassarum septatarum (articulis ca. 10 μ longis) composita, ad ambitum haud fimbriata; asci ovato-globosi, paraphysati, 70-85 \times 55-70, octospori; sporae ellipsoideo-oblongae, medio septatae, non vel vix constrictae, utrinque rotundatae dilute brunneae leves, 37-42 \times 18-21.

Hab. in foliis *Urophylli banahaensis* (Rubiaceae), Mt Maquilang, Laguna, Ins. Philipp. (C. F. BAKER).

73. *Asterina Fagaræ* H. S. Yates, The Philipp. Journ. of Sc., 13., Bot. 4865

1918, p. 373. — Epiphylla; plagulas orbiculares vel irregulares, 4-6 mm. diam., vel confluentes et superficiem foliorum obtegentes efformans; mycelio radiante, ex hyphis brunneis ramosis anastomosantibus 4-6 μ crassis composito; hyphopodiis numerosis, ramis simillimis, alternantibus vel irregularibus, 10-15 μ longis, 4-5 μ latis; peritheciis opacis, rotundatis, applanatis, 170-220 μ diam., stellatim dehiscentibus; contextu ex hyphis radiantibus obscure-brunneis 5-7 μ ct. composito; ascis ovatis, 50-55 \times 35-40, octosporis, paraphysatis; sporidiis conglobatis, oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, brunneis, laevibus, 22-25 \times 11-13.

Hab. in foliis *Fagaræ Avicennæ* (Rutaceae), Prov. Rizal, Luzon, Ins. Philipp. (RAMOS).

74. *Asterina banguiensis* H. S. Yates, The Philipp. Journ. of Sc. Bot., 4866

13., 1918, p. 372. — Epiphylla; plagulas plus minus effusas, 0,5-2 cm. longas et latas formans, vel orbiculares et 3-6 mm. diam., vel confluentes et magnam partem folii occupantes; mycelio ex hyphis ramosis valde anastomosantibus obscure brunneis 5-6,5 μ crassis composito; articulis 15-22 μ longis; hyphopodiis numerosis, cylindraceis 10-12 μ longis, 5 μ latis; peritheciis numerosis, dense dispositis, rotundatis, 120-160 μ diam., late et plane convexis, opacis contextu et hyphis 2-4,5 μ crassis composito, ambitu mox magis fimbriato; ascis ovatis, octosporis, paraphysatis, 45-50 \times 18-22; sporidiis ovato-oblongis, medio septatis et constrictis, utrinque rotundatis, brunneis, laevibus, 20-22 \times 8-10.

Hab. in foliis *Glycosmidis* (Rutaceae), Bangui Prov. Llocos Norte, Luzon, Ins. Philipp. (RAMOS).

75. *Asterina Rhabdodendri* Syd., Ann. Mycol. XIV, 1916, p. 92. — Hy- 4867

pophylla, plagulas parum perspicuas orbiculares vel confluyendo irregulares 3-10 mm. diam. formans; mycelio ex hyphis rectis vel rectiusculis radiantibus fere rectangulariter ramosis obscure fuscois 4-5,5 μ crassis, septatis (articulis 10-25 μ longis) composito; hyphopodiis numerosis, exacte oppositis, rarius singulis uniliteralibus, rectis, cylindraceis, obtusis, integris, continuis, 9-12 \times 4-4,5; thyrrotheciis sparsis vel laxe gregariis, orbicularibus, 130-200 μ diam., ambitu leniter fimbriatis, e strato simplici hypharum rectarum obscure fuscicarum crebre septatarum (articulis 6-10 \times 3-3,5) radiatim compositis, membrana basali nulla; ascis ovato-globosis, paraphysatis, 35-45 \times 32-40, 4-8-sporis; sporidiis ellipsoideo-oblongis, medio 1-septatis et constrictis, facile in loculos secedentibus, fuscis, ver-

rucosis, 23-26 \times 12-15.

Hab. in foliis *Rhabdodendri crassipedis* (Rutaceae), Manaos, Rio Negro, Brasilia (E. ULE).

76. *Asterina decipiens* Syd. in Leaflets of Philipp. Bot. V (1912) p. 4868 1540. — Peritheciis hypophyllis, plerumque per totam folii superficiem vel magnam ejus partem aequaliter denseque distributis, discoideis, 120-170 μ diam., atris, eximie radiatim contextis, stellatim dehiscentibus; mycelio haud copioso, ex hyphis flexuosis, densiuscule ramosis et intertextis, gracilibus, 3,5-4,5 μ cr. composito; hyphopodiis alternis, continuis, fuscis, late cylindraceis vel irregularibus, rectis vel curvatis, 7-9 \times 3-4; ascis ovato-globosis, 15-25 \times 12-18, octosporis; sporidiis elliptico-oblongis, medio vel circa medium 1-septatis, vix vel leniter constrictis, utrinque rotundatis, levibus, ex hyalino fuscis, 16-20 \times 8-9; pycnidiiis peritheciis similibus sed minoribus; sporulis late piriformibus, continuis, fuscis, 14-18 \times 9-10.

Hab. in foliis vetustis *Champereiae Cumingianae* (Santalaceae), Puerto Princessa, Palawan, ins. Philipp. — Habitu *A. Elmeri* Syd. similis sed hyphis, hyphopodiis et sporidiis alienis.

77. *Asterina Elmeri* Syd., Leaf. Philipp. Bot., IV, 1911, Art. 62, p. 4869 1156. — Peritheciis epiphyllis, densissime aggregatis et maculas orbiculares 2-10 mm. diam., confluyendo saepe irregulares formantibus, 120-180 μ diam., radiatim contextis, centro perforatis, atris, opacis; mycelio et hyphis dense intertextis anastomosantibus obscure brunneis 6-8 μ latis, hyphopodia solitaria vel opposita continua, 9-11 μ longa et 4-5 μ lata, gerentibus composito; ascis globosis vel subglobosis, 40-50 \times 30-45, octosporis; sporidiis conglobatis, ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, ex hyalino brunneis, 25-30 \times 10-14.

Hab. in foliis *Champereiae fragilis* (Santalaceae), Magallanes Ms. Giting-giting, Prov. Capiz, ins. Sibuyan, ins. Philipp. (ELMER).

78. *Asterina opaca* H. et P. Syd., Ann. Mycol. X, 1912, p. 38. — Epi- 4870 phylla, maculas atras orbiculares 1-3 mm. diam. efformans; hyphis brevibus, sed valde ramosis anastomosantibusque, castaneo-brunneis, 5-7 μ cr., densissime intertextis; hyphopodiis minutis, sessilibus, 1 cellularibus, castaneo-brunneis, apice rotundatis v. raro leniter attenuatis, alternantibus v. oppositis, 9-11 μ long. 5-6 μ latis; peritheciis saepe 1-2 tantum in quaque macula, in maculis majoribus usque 10 laxè dispositis, rotundatis, 150-250 μ diam., irre-

gulariter disrumpentibus, atris, contextu opaco, ambitu vix fimbriatis; ascis ovato-globosis v. ovatis, apice leniter incrassatis, apapophysatis, 50-70 \times 35-46, octosporis; sporidiis conglobatis, ellipsoideis, utrinque late rotundatis, medio septatis et valde constrictis, levibus, ex hyalino castaneo-brunneis, 26-28 \times 13-14.

Hab. in foliis *Chrysophylli natalensis* (Sapotaceæ), Amanzimtote Natal, Africae austr. (E. M. DODGE).

79. *Asterina Chrysophylli* P. Henn., Hedw. vol. 48 (1908) p. 12. — Ma- 4871
culis mycelii epiphyllis, effusis, atris; hyphis ramosis, atris, 4-7 μ crassis; peritheciis aggregatis, dimidiato-scutatis, radiato cellulosis, margine fimbriatis, 200-250 μ diam; ascis ovoideis, octosporis, 50-60 \times 40-45; sporidiis ovoideis vel ellipsoideis, medio septatis, constrictis, conglobatis, atris, 25-30 \times 12-14.

Hab. in foliis *Chrysophylli* sp. (Sapotaceæ), Serra da Cantareira, S. Paulo, Brasilia.

80. *Asterina diaphorella* Sydow, Ann. Mycol; 17., 1919, p. 35. — Pe- 4872
raffinis *A. laxiusculæ*, a qua differt hyphopodiis hemisphaericis 6-7 μ altis et latis et sporidiis minoribus, 26-30 \times 11-14.

Hab. in foliis *Sideroxyli ferruginei* (Sapotaceæ), Santa Cruz Island, prov. Zamboanga, Mindanao, ins. Philippin. (E. D. MERRILL). — Sydow, Fungi exotici exsicc. n. 269 sub *A. laxiuscula* Syd.

81. *Asterina laxiuscula* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. 4873
of Sci. VIII (1912) p. 276. — Mycelio epiphylllo, parce vel modice evoluto, tenui, laxo, effuso, ex hyphis castaneo-brunneis, 4-5 μ cr., ramosis, remote septatis formato; hyphopodiis alternantibus, continuis, obtusis, rectis, crasse cylindræis, 6-10 \times 4-6, castaneis; peritheciis mox laxè sparsis, mox magis aggregatis, applanatis, rotundatis, extus stris, stellatim dehiscentibus, 150-220 μ diam., contextu opaco ex hyphis fuscis 3-4 μ cr. composito, ambitu parum vel modice fimbriatis; ascis ovatis, apapophysatis, 55-75 \times 40-50, octosporis; sporidiis conglobatis, oblongis, utrinque late rotundatis, medio septatis et constrictis, ex hyalino fuscis, levibus, 32-40 \times 15-18.

Hab. in foliis vivis *Sideroxyli angustifolii* et *S. ferruginei* (Sapotaceæ), Luzon et Mindanao, ins Philipp. (MERRILL).

82. *Asterina Saccardoana* Theiss., Gatt. Asterina, p. 45, tab. VI fig. 4874
31-32 (1913), *A. correaecola* Sacc. in herb., non Auct. — Hyphis micelialibus atro-brunneis, subtorulosis, irregulariter ramosis, 8-9 μ crassis, laxè septatis; hyphopodiis raris, versiformibus, cylindricis,

continuis, torulosi vel subsinuatis, 10-16 \times 6-10; peritheciis hemisphaericis, compactis, ex hyphis rectis, obscure brunneis, 6-8 μ cr. opace radiato-contextis, peripherice non fimbriatis, e vertice stellatim dehiscentibus; ascis globosis vel ovatis, octosporis, 80-100 \times 55-80, jodi ope coerulescentibus, fere sessilibus, paraphysibus sparse obvallantibus hyalinis, apice subcoloratis, basi ramosis, firmis, 3-4 μ crassis, septatis circumdati; sporidiis maximis, 46-54 \times 22-26, brunneis, utrinque rotundatis, ad septum constrictis, loculis vel aequalibus vel plerumque supero latiore et longiore, 26-29 \times 23-26, inferiore 22-25 \times 18-22.

Hab. in foliis *Sideroxyli* (Sapotaceae), in Australia.

83. *Asterina lobata* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1541 4875 et VI (1913) p. 1927. — Mycelio hypophyllo, maculas atras tenues irregulares saepe confluentes et subinde magnam folii partem occupantes efformante, ex hyphis tenuibus, dense reticulatim intertextis, remote septatis, brunneis, 4-5 μ crassis composito; hyphopodiis alternantibus, irregulariter 2-4-lobatis, 5-9 μ altis, lobis ad apicem rotundatis, 3-3,5 μ latis; peritheciis densiuscule dispositis, minutissimis, rotundatis, 90-125 μ diam., tenuissimis, mox irregulariter dehiscentibus, contextu brunneo; ascis ovato-globosis, 25-35 \times 20-25, octosporis; sporidiis oblongo-ellipsoideis, utrinque obtusis, medio 1-septatis, levibus, ex hyalino fuscis, 13-18 \times 6-7; pycnidiis peritheciis similibus, sporulis late piriformibus, continuis, fuscis, 18-22 \times 14-17.

Hab. in foliis vetustis *Picrasmae philippinensis* (Simarubaceae), Puerto Princesa, Palawan, ins. Philipp., nec non *P. javanicae*, Todaya, Mt. Apo, Mindanao, ins. Philipp.

84. *Asterina diaphana* Syd., Leaflet. Philipp. Bot., IV, 1911, Art. 62, 4876 p. 1155. — Peritheciis hypophyllis, superficialibus, in greges rotundatos vel irregulares 0,5-2 cm. latos laxè dispositis, 100-200 μ diam., radiatim contextis, planis, tenuissimis, atris, sub microscopio fuliginis et diaphanis, poro minuto centrali apertis; mycelio parce evoluto, radiante, et hyphis irregulariter ramosis 4-6 μ crassis, hyphopodia solitaria bicellularia elongato-ovoidea fusca 20-28 μ longa 10-14 μ lata gerentibus composito; ascis globosis vel subglobosis, 35-55 \times 35-42, octosporis, paraphysatis; sporidiis conglobatis, oblongo-ellipsoideis, utrinque rotundatis, 1-septatis, ad septum valde constrictis, facile in loculos secedentibus (loculis aequalibus vel subaequalibus), diu hyalinis, tandem fuscis, mucro hyalino copiose obnatis, 21-28 \times 12-15.

Hab. in foliis vivis *Solani manu caling* (Solanaceae), Todaya, Ms. Apo, Distr. Davao, ins. Mindanao in Philipp. (ELMER).

85. *Asterina Büttneriae* Theiss., Gatt. *Asterina* (1913) p. 99, tab. II fig. 19 et 21, tab. IV fig. 15. — Plagulis tenuibus, nebulosis, indeterminatis, epiphyllis; hyphis subiculi 3-4 μ crassis, gracilibus, subflexuoso-undulatis, fusco-brunneis, oppositae vel alterne ramosae; hyphopodiis alternis, flaccido-botuliformibus, 8-12 \times 4-5; peritheciis hemisphaericis, 140-170 μ diam., poro centrali primum, dein irregulariter stellatim dehiscentibus, basi brevissime flexuose fimbriatis, ex hyphis 5 μ cr. brunneis contextis; ascis ovatis vel ovato-ellipsoideis, aparaphysatis, octosporis, 35 \times 30-35, jodo non coeruleo; sporidiis brunneis, 23-27 \times 9-11, oblongis, leniter constrictis, utrinque rotundatis, episporio verrucosulo, loculo supero paullo latiore.

Hab. in foliis *Büttneriae australis* (Sterculiaceae), Tubarao, Sancta Catharina et Sao Leopoldo, Rio Grande do Sul in Brasilia.

86. *Asterina indica* Syd. in Sydow et Butl., Ann. Mycol. IX, 1911, p. 390. — Maculis epiphyllis, rotundatis v. irregularibus, 0,3-1 cm. diam., brunneis; hyphis mycelii radiantibus, anastomosantibus, brunneis, 4-7 μ cr., hyphopodia alternantia applanato-globosa v. lobata 9-11 μ lata et 8 μ alta gerentibus; peritheciis paucis in quaque macula, radiatim contextis, 150-200 μ diam., irregulariter dehiscentibus, contextu opaco; ascis ovato-globosis, ovatis usque oblongis v. clavatis, apice valde incrassatis, 43-62 \times 30-40, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et valde constrictis, ex hyalino brunneis, levibus, 22-26 \times 10-13.

Hab. in foliis *Symploci* sp. (Symplocaceae), Darjeeling, Indiae or. (W. Mc RAE).

87. *Asterina grammocarpa* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 557. — Epiphylla, totum folium plus minus occupans; mycelio ex hyphis undulatis valde anastomosantibus flavo-brunneis 3,5-4,5 μ crassis composito; hyphopodiis alternantibus, bicellularibus, 11-16 \times 4-4,5, cellula basali recta v. subrecta, superiore leniter lobata et plerumque plus minus recurvata; thyriotheiciis dense gregariis, rotundatis, 90-120 μ diam., brunneis usque obscure brunneis, ex hyphis rectis 3-5-4,5 μ latis crebre septatis (articulis 5-8 μ long.) strato simplici compositis, ambitu leniter fimbriatis, ascis globosis v. subglobosis, octosporis, aparaphysatis, rotundatis, medio 1-septatis et constrictis, brunneis, minute verruculosis (verrucis distincte

lineatim dispositis), 17-22 \approx 8-9.

Hab. in foliis *Symploci* sp. (Symplocaceæ), Angat, prov. Bulacan, Ins. Philippin. (M. RAMOS).

88. *Asterina Camelliae* Syd. et Butl., Ann. Myc. IX, 1911, p. 389, t. XVII 4880
fig. 1-3. — Peritheciis epiphyllis, membranaceis, scutatis, ex hyphis radiantibus formatis, stellatim dehiscentibus, 200-300 μ diam., in crustas atras effusas usque 1 cm. latas superficiales dense aggregatis v. confluentibus; ascis paucis, elliptico-obovatis, octosporis (ut videtur), 70-100 \approx 25-35; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, brunneis, 30-33 \approx 16.

Hab. in foliis *Camelliae Theae* (Theaceæ), Dunmur Dulung, Sibsagar District, Assam, Indiae or. (G. WATT). — Socio adest (parasiticum ?) *Dimerium Wathii*.

89. *Asterina Pipturi* Syd., Ann. Mycol. XIV, 1916, p. 366. — Mycelio 4881
epiphylllo, plagulas tenues griseo-atras orbiculares 2-5 mm. latas formante, ex hyphis rectiusculis vel parum flexuosis densiuscule et rectangulariter ramosis septatis 4 μ latis brunneis composito; hyphopodiis raris, dispersis, sessilibus, continuis, plerumque leniter lobulatis, mox latioribus, quam altioribus, mox e contra altioribus quam latioribus, 5-8 μ altis; thyriotheiciis in medio macularum congregatis, orbicularibus, 80-100 μ diam., mox late apertis, e singulo strato hypharum olivaceo brunnearum 2,5-3 μ latarum sat crebre septatarum (articulis 5-6 μ longis) fere rectarum, composito, ambitu vix fimbriatis, membrana basali nulla; ascis aparaphysatis, subglobosis vel ovatis, 25-35 \approx 22-30, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio leniter constrictis, verruculosis, fusco-brunneis, 18-20 \approx 7-8, cellulis fere aequalibus.

Hab. in foliis *Pipturi arborescentis* (Urticaceæ), Los Baños, ins. Philipp. (J. J. MIRASOL). — *Art. Lawsoniae* affinis.

90. *Asterina pusilla* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. 4882
of Sci. VIII (1913) p. 488. — Epiphylla, maculas parum conspicuas, minutas vel confluendo majores et effusas formans; mycelio ex hyphis longiusculis, dilute fuscis, vix vel parce septatis, parum ramosis, 3,5-4,5 μ crassis composito; hyphopodiis continuis, alternis, fere semper 2-3-lobatis (lobis obtusis), usque ad 10 μ longis, saepe latioribus quam altioribus; peritheciis laxe gregariis, minutissimis, 70-80 μ diam., tenuissimis, radiatim strato simplici contextis, e centro ad marginem versus stellatim dehiscentibus, contextu ex hyphis 2-3 μ latis regulariter composito; ascis subglobosis, 20-26 \approx 17-20, octosporis, aparaphysatis; sporidiis 1-septatis et valde con-

strictis, levibus, fuscis, 16-20 × 7-8.

Hab. in foliis *Premnae nauseosae* (Verbenaceae) et *P. sp.*, Luzon, Prov. Bataan, ins. Philipp. (GRAFF).

91. *Asterina sphaerotheca* Karst. et Roum. — Syll. IX p. 383 — var. *pro-* 4883
diga Theiss., Gatt. Asterina, p. 59, tab. II fig. 20, V fig. 14 et VIII fig. 9 (1913). — Subiculo flexuoso-crispo, hyphis irregulariter undulatis et reticulato-anastomosantibus, firmis, 5,5-6,5 μ crassis; hyphopodiis oppositis vel etiam alternis, sessilibus, 8 × 6, obsolete sinuato-lobatis; peritheciis orbicularibus 110-180 μ diam. vel ellipsoideis, 250 × 140, colliculoso-hemisphaericis, poro centrali vel lobis paucis radiatim dehiscentibus, vel rima lineari irregulariter ruptis, ex hyphis brunneis, subtorulosis vel rectis, 4-7 μ cr., firmis (cellulis 8-10 μ longis) contextis, peripherice aetate hyphis laete griseis flexuosis 3,5-4,5 μ cr. longius excurrentibus; ascis globosis vel ovatis, 50-65 × 40-48, tunica crassa jodo lutescenti, octosporis, apapophysatis, mucro parco obvolutis; sporidiis brunneis, constrictis, utrinque rotundatis, 30-36 (interdum 40) × 13-16, episporio tenuissime verruculoso, loculo supero plerumque parum latiore. — Conidiis (*Asterostomellae*) brunneolis, ovatis vel ellipsoideis, rectis vel subcurvulis, 18-25 × 11-13, medio hyalino-cinctis continuis.

Hab. in foliis lianae cujusdam, Sao Leopoldo, Rio Grande do Sul, in Brasilia.

92. *Asterina subinermis* Syd. in Leaflets of Philipp. Bot. VI (1913) p. 4884
 1927. — Mycelio hypophyllo, rarius et tunc parce etiam in epiphylllo evoluto, late effuso, vix maculiformi, ex hyphis longiusculis, ramosis, fuscis, vix vel remote septatis, 4-5 μ crassis composito; hyphopodiis rarissimis, continuis, subglobosis, ovatis vel irregularibus et tunc saepe parum lobatis, alternis vel subinde etiam oppositis, fuscis, 9-10 × 6-8; peritheciis aggregatis, ambitu circularibus, 175-220 μ diam., stellatim dehiscentibus, amoene radiatim strato simplici contextis, contextu fusco ex hyphis 2-3 μ latis composito, ambitu hyphis flexuosis, radiantibus, 30-60 × 2,5-4 cinctis; ascis globosis vel subglobosis, octosporis, 42-55 × 35-45, apapophysatis; sporidiis oblongis, medio 1-septatis, vix vel parum constrictis, utrinque late rotundatis, ex hyalino fuscis, verruculosis, 32-37 × 14-16, loculis aequalibus vel fere aequalibus.

Hab. in foliis vetustis fruticis cujusdam, Cabadbaran, Mindanao, ins. Philipp.

93. *Asterina tayabensis* H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 4885
 372. — Plagulis epiphyllis, atris, primo orbicularibus 3-4 mm. diam.,

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ludentibus et magnam partem folii obtegentibus; mycelio abundanter hyphis brunneis septatis anastomosantibus ramosis irregularibus 4-6 μ latis composito; hyphopodiis paucis dispersis, irregulariter distributis, breviter cylindraceis, rotundatis, 10-12 μ 7 μ latis; peritheciis numerosis, globosis 130-200 μ diam., stellatim dehiscentibus, radiatim contextis ex hyphis 2-6 μ subglobosis, octosporis, 25 \times 30, paraphysatis; sporidiis utrinque rotundatis, medio 1-septatis, constrictis, echinulatis, longis, 10 μ latis.

foliis plantae ignotae, Basiad, Tayabas Luzon, Ins. Philipp. *distincta* Berk. in Herb. Kew, in Theissen Ann. Mycol. 4886 p. 190. — Nomen nudum.

G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, 4887 (Etym. a OL. MARSHALL WARD). — Stromata ut in *Asterina* folio externo stigmocystis intercalaribus inflatis gerente. — *enda* est sec. Auct. *Asterina* (*Asterula*) *mycoproides* Sacc.

ERTIA G. Arnaud, Ann. École Nat. Agricult. Montpellier, 4888 1918, p. 165 (Etym. a Domin. LIBERT). — Tab XXXI. — *Dimerosporii* Fuck.; mycelio stigmopodiis destituto sed stigmatibus intercalaribus nodulosis donato. — Huc pertinet sec. *sterina Couepintae* P. Henn. (= *A. globulifera* Pat.).

G. Arnaud, Ann. École Nat. Agricult. Montpellier t. 16., 63 (ad interim). (Etym. a gen. *Halbania* Rac. cui prox.). — ut in *Dimerosporio* Fuck.; a gen. *Halbania* sporidiis uniseptatis differt.

irregularis (Syd.) G. Arnaud, l. c., *Asterina irr.* Syd. in Leav. Philipp. Bot. V (1912) p. 1540. — Mycelio hypophyllo, eximie praecipue ad marginem, plagulas atras discoidales vel irregulares 0,5-1 cm. longas efformante, tenui, ex hyphis dense ramulosis anastomosantibusque, obscure brunneis, septatis, 5-6 μ crassis hyphopodiis paucis alternantibus, 10-14 \times 6-8; peritheciis ovatis rotundatis vel saepius elongatis, subinde etiam tribosioideis, 200-300 μ diam. vel usque ad 750 μ elongatis, stigmatibus quasi hysteroideis dehiscentibus, ambitu hyphis ramulosis, contextu obscure brunneo opaco; ascis ovato-globosis 5 \times 50-65, octosporis; sporidiis ellipsoideis, utrinque late

rotundatis, medio septatis et valde constrictis, ubique verrucosis, ex hyalino brunneis, 32-36 \times 15-16.

Hab. in foliis vetustis *Vaticae obtusifoliae* (Dipterocarpaceae), Puerto Princesa, Palawan, ins. Philipp.

BALANSINA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 123. — Stroma ascigerum centrale stellatum, cum mycelio interno pluribus locis connexum; mycelium externum, ex hyphis ramosis stigmatocystis distinctis destitutis; asci ovoidei, oblongi, erecti, contextu paraphysideo circumdati; sporidia bilocularia, brunnea.

1. *Balansina stellata* G. Arnaud, l. c. p. 124, tab. XII. — Maculis 1-2,5 4890 mm. latis, stromatibus paucis unilocularibus 0,5-1 mm. long.; ascis ovoideis oblongis, ventricosis, octosporis; sporidiis bilocularibus, brunneis, 20-20,5 \times 9-10, loculis longitudine subaequalibus, superiore tantum latiore. Mycelio externo brunneo ramoso, interno subcuticulari, hyalino

Hab. in foliis *Myrsineae* ejusdam, Caaguazu, America austr. (J. B. BALANSA).

TRICHAETERINA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 172 (Etyml. e mycelio setuloso). — Est *Asterina* mycelio setuloso praedita.

1. *Trichasterina Styraeis* (Th.) G. Arnaud. l. c., *Asterina Styraeis* Theiss., 4891 Gatt. *Asterina*, p. 41 tab. III fig. 6 et VII fig. 26-27 (1913). — *A. silvatica* Theiss. Dec. Fung. bras. 77, non Speg.; *A. silvatica* Rehm in Rick, Fungi austro-amer. 386 non Speg. — Plagulis epiphyllis, 0,5-1 cm. latis, confluentibus, aggregatis; hyphis subiculi 6-8 μ crassis, obscure brunneis, laxè septatis, hyphopodiis subglobosocapitatis, alternis, 7-9 μ latis, integris, sessilibus; peritheciis 230-300 μ diam., late hemisphaericis, stellatim dehiscentibus, basi hyphis rectis crebris in mycelium excurrentibus, opace ex hyphis brunneis 4-5 μ cr. usque ad centrum egregie dentato-serratis contextis; ascis globosis vel ovatis, 70-90 \times 45-60, octosporis, sessilibus, jodi ope non coerulescentibus, paraphysibus firmis, 2,5-4 μ crassis, griseo-hyalinis, septatis obvallantibus; sporidiis ellipsoideis, brunneis, vix constrictis, utrinque rotundatis, 30-35 \times 16-19, cellulis subaequalibus.

Hab. in foliis vivis *Styraeis acuminatae* (Styracaceae), Sao Leopoldo, Rio Grande do Sul, Brasilia.

PARASTERINA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 246 et p. 420. — Est *Asterina* paraphysibus donata.

1. **Parasterina Ramosii** Syd., Ann. Mycol. XV, 1917, p. 246. — Epi- 4892
phylla, plagulas primitus orbiculares minutas sed mox confluendo
maiores et irregulares formans; mycelium ex hyphis rectangula-
riter ramosis septatis (articulis 14-30 μ longis) castaneo-brunneis
5-7 μ crassis compositum; hyphopodia sat numerosa, typice (sed
inconstanter) opposita, bicellularia, 12-18 \times 6-8, crasse cylindracea,
recta, integra, cellula basali minuta; thyriothecia densiuscule di-
sposita, primitus rotundata, 200-300 μ diam., dein elliptica et usque
600 μ longa, 200-250 μ lata, hemisphaerica, crustose fimbriata, ra-
diatim contexta, opaca, stellatim dehiscentia; asci elliptici vel
ovati, 50-80 \times 35-48, octospori, paraphysati; sporae ellipticae vel
oblongo-ellipticae, medio septatae et parum constrictae, in matu-
ritate atrae, opacae, 25-30 \times 12-14.

Hab. in foliis *Eugeniae* sp. (Myrtaceae), Rizal, Luzon, Ins.
Philipp. (M. RAMOS).

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV
p. 466, XVI p. 408, XVII p. 533, XXII p. 33.

1. **Dimerosporium Triumphettæ** Arnaud, Ann. École Nat. Agricult. Mont- 4893
pellier, t. 16., 1918, p. 180, tab. 36. — Maublanc A., Bull. Soc. My-
col. de Fr. t. 36., 1920, p. 39, fig. 7-9. — Maculis epiphyllis, 2-3
mm. diam., numerosis; hyphis ramosis, septatis, sat pallide brun-
neis, 4 μ crassis; hyphopodiis globosis v. piriformibus, sessilibus,
5-7 μ diam.; peritheciis minutis, 60-100 μ diam., primum depresso-
clypeatis, distincte radiatis, dein hemisphaericis, gelatinosis; ascis
globosis vel late ovoideis, sessilibus, 30-40 μ diam., aparaphysatis;
sporidiis octonis conglobatis, brunneis, ovoideis v. subpiriformibus,
1-septatis, constrictis, loculo inferiore saepe paulo angustiore, 18-23
 \times 10-12, episporio minute granuloso.

Hab. in foliis vivis *Triumphettæ* sp. (Tiliaceae), Rio de
Janeiro, Brasilia.

QUESTIERIA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 4894
1918, p. 186, tab. XL, XLI (Etym. a **QUESTIER** nom. prop.). — A
Dimerosporio praecipue differt parietibus stromatis demum gelati-
nosis. — Sec. Auét., huc pertinent ut subgenera:

Eu-Questieria Arnaud l. c., stromatibus omnino gelatinosis suban-
hystis. — Typus *Questieria pulchra* (Sacc. in *Dimerosporio*) Arnaud.

Balladynopsis Arnaud l. c., stromatibus parietibus brunneis contextu vix distincto praeditis. — Typus *Questieria monothea* (Patouill. et Gaill. in *Asterina*) Arnaud.

ASTERINELLA Theiss., Brot. Ser. Bot. X (1912) p. 165. — (Etym. ab affini *Asterina*). — A gen. *Asterina* distinguitur mycelio hyphopodiis destituto.

1. *Asterinella venusta* Sydow, Ann. Mycol. 18., 1920, p. 101. — Pla- 4895
gulas amphigenas tenuissimas orbiculares minutas 1-3 mm. diam. formans; mycelium ex hyphis radiantibus obscure fuscis subrectis vel leniter undulatis rectangulariter ramosis 3-4 μ crassis hand hyphopodiatis septatis formatum; thyriothecia copiosa, gregaria orbicularia vel elliptica, 60-100 \times 50-70, radiatim ex hyphis rectis crebre septatis (articulis 3-5 μ longis) 3-3,5 μ latis obscure fuscis contexta, ad ambitum non vel parce fimbriata; asci aparaphysati, 20-30 \times 20, 8-spори; sporae oblongae, ad apicem rotundatae, basim versus leniter attenuatae, supra medium constrictae, circiter 15-20 \times 5-6 (nondum perfecte maturae).

Hab. in foliis *Anaxagoreae luzonensis* (Anonaceae), Mt. Maquiling, prov. Laguna, Ins. Philippin. (C. COLLADO).

2. *Asterinella obesa* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. 4896
of Sci. VIII (1913) p. 490. — Epiphylla, maculas atras, laxas, rotundatas, 2-8 mm. diam. efformans; mycelio laxo, ex hyphis longis, parce ramosis, remote septatis obscure brunneis, crassis, 6-10 μ latis composito; hyphopodiis nullis; peritheciis laxè aggregatis, fere semper elongatis, 250-400 \times 125-200, rarius rotundatis, centro elevatis, rima longitudinali apertis, aterrimis, amoene radiatim contextis, contextu opace olivaceo-atro ex hyphis 3,5-4,5 μ latis composito, ambitu hyphis numerosis crassis 5-8 μ latis obscure olivaceo-brunneis fimbriatis; ascis globosis, subglobosis vel ovatis, aparaphysatis, 50-60 \times 40-52; sporidiis conglobatis, ellipseideis vel ellipseideo-oblongis, ex hyalino obscure olivaceo-brunneis, levibus, 32-38 \times 16-20, loculo superiore maximo, inferiore minimo, 7-10 μ tantum longo et omnino appendiculiformi saepe dilutiore.

Hab. in foliis *Canarii villosi* (Burseraceae), Luzon, Prov. Nueva Vizcaya, ins. Philipp. (MC. GREGOR). — Hyphis crassis et sporidiis inaequiloculis praecipue facileque distincta.

3. *Asterinella Santiriae* Syd., Ann. Mycol. XV, 1917, p. 248. — Am- 4897
phigena, plerumque epiphylla, plagulas irregulares usque 1 cm. diam. formans; mycelium ex hyphis rectangulariter laxèque ramo-

sis plerumque rectis $6-9\ \mu$ crassis septatis compositum, hyphopodiis destitutum, sed una alterave cellula subnodose incrassata (usque $11\ \mu$ crassa); thyriotecia laxe gregaria, rotundata, $300-350\ \mu$ diam. vel elliptica usque $400 \times 250-300$, ambitu fimbriata, radiatim ex hyphis $4\ \mu$ crassis rectis contexta, obscure castaneo-brunnea, subopaca; asci ovato-globosi, aparaphysati, $50-75 \times 45-60$, octospori; spores oblongo-ellipsoideae, utrinque rotundatae, inaequaliter septatae, cellula superiore duplo majore, brunneae, leves, $32-36 \times 17-19$.

Hab. in foliis *Santiriae nitidae* (Burseraceae), pr. Paete, Laguna, Ins. Philipp. (C. F. BAKER).

4. *Asterinella Dipteroearpi* H. et P. Sydow, Ann. Mycol. XII, 1914, 4898 p. 558. — Amphigena, plerumque epiphylla maculas $2-10\ \text{mm.}$ diam. efformans; mycelio laxo ex hyphis crassis ramosis opace fuscis $6-8\ \mu$ latis hyphopodiis destitutis composito; thyriotheciis laxe aggregatis, rotundatis et $140-200\ \mu$ diam. v. elongatis et usque $400\ \mu$ longis, atris, contextu amoene radiato ex hyphis rectis fuscis $4-6\ \mu$ crassis septatis (articulis $10-15\ \mu$ long.) composito; ascis ovato-globosis, octosporis, aparaphysatis, $55-70 \times 35-45$; sporidiis conglobatis, oblongis, infra medium 1-septatis, ex hyalino brunneis, utrinque rotundatis, non constrictis, levibus, $24-28 \times 8-10$.

Hab. in foliis *Dipteroearpi verniciflui* (Dipterocarpaceae), Angat prov. Bulacan, Ins. Philippin. (M. RAMOS). — *A Morenoella Dipteroearpi* (P. Henn.) Theiss. omnino diversa.

5. *Asterinella luzonensis* Syd., Enum. Philipp. Fungi II, in Philipp. 9899 Journ. of Sci. VIII (1913) p. 491. — Mycelio hypophyllo, plerumque parvissimo, vix visibili, ex hyphis longiusculis, flexuosis, anastomosantibus, fusco-brunneis, $3,5-5\ \mu$ crassis, septatis (articulis $16-22\ \mu$ longis), levibus composito; hyphopodiis nullis; peritheciis plerumque in greges $0,5-1\ \text{cm.}$ latos laxissime dispositis, inversis, variabilibus, ambitu aut rotundatis aut irregularibus usque valde elongatis, $150-200\ \mu$ diam. vel usque ad 800×170 , strato simplici ex hyphis rectis fusco-brunneis $3,5-4\ \mu$ cr. contextis, poro centrali vel rima longitudinali dehiscentibus; ascis globosis vel subglobosis, $50-62 \times 40-52$, octosporis, aparaphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, vix vel leniter constrictis, levibus, tandem brunneis, $29-33 \times 13-15$.

Hab. in foliis *Shorea polyspermae* (Dipterocarpaceae), Luzon, Prov. Bataan, ins. Philipp. (GRAFF). — Affinis *A. Humiriae* (P. Henn.) Theiss., a qua praecipue peritheciis majoribus plerumque elongatis differt.

6. *Asterinella Elaeagni* Sydow, Ann. Mycol. 18., 1920, p. 101. — *Epiphylla*, plagulas orbiculares 2-4 mm. diam. atras formans; mycelium sat ramosum, anastomosans, ex hyphis undulato-tortuosis fuscis ca. 3 μ crassis compositum, haud hyphopodiatum; thyriothechia gregaria, orbicularia vel elliptica, 90-150 \times 70-100, opace contexta; asci ovati, 25-35 \times 25-30, 8-spori, ut videtur aparaphysati; sporae oblongae, utrinque rotundatae, fuscae, leves, medio septatae, parum constrictae, 18-20 \times 7-8, loculis fere aequalibus.

Hab. in foliis *Elaeagni philippinensis* (Elaeagnaceae), Mt. Maquiling, prov. Laguna Ins. Philippin. (C. COLLADO).

7. *Asterinella ramuligera* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 182. — *Amphigena*, plagulas griseo-atras mediocres vel majusculas 0,5-3 cm. latas irregulares formans; mycelio laxiusculo, ex hyphis longis fuscis 6-8 μ crassis remote septatis ramosis haud hyphopodiatis, sed cum ramulis novellis copiosis, 20-30 μ longis ad apicem lobatis et hyphopodia erecta simulantibus obsitis composito; peritheciis sparsis ambitu orbicularibus, inversis, 140-200 μ diam., non vel parum fimbriatis, stellatim dehiscentibus, contextu obscure brunneo, ex hyphis ca. 3 μ crassis crebre septatis (articulis 7-10 μ longis) composito; ascis globulosis vel ovatis, aparaphysatis, tenuiter tunicatis, 35-47 μ longis, 30-40 μ latis, octosporis, sporidiis oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, ubique verrucosis, ex hyalino fuscis, 20-26 \times 10-12.

Hab. in foliis vivis *Microdesmidis casearifoliae* (Euphorbiaceae), Talawan Taytay, Ins. Philipp. (MERRILL).

8. *Asterinella Hydnocarpi* H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 372 (corr. *Asterinella Hydnocarpiæ*). — *Epiphylla*, maculas irregulares, 5-8 mm. diam., v. confluentes et superficiem foliorum plus minusve obtegentes efformante; mycelio laxo ex hyphis radiantibus 8 μ cr. brunneis composito, ramis irregularibus; hyphopodiis nullis; peritheciis numerosis in quaque macula, rotundatis et 300-400 μ diam., obscure brunneis, subopacis, contextu radiato, ex hyphis rectis brunneis 5 μ diam. composito, ambitu fimbriatis, poro centrali dehiscentibus; ascis globosis, 70 μ diam., octosporis, paraphysatis, sporidiis oblongo-ovoideis, medio 1-septatis, constrictis, fuscis, loculo supero parum latiore, 40-50 \times 25-28.

Hab. in foliis *Hydnocarpi falcati* (Flacourtiaceae), Catubing River, Samar, Ins. Philipp.

9. *Asterinella gracilis* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 559. — *Hypophylla*, pro ratione saepe aegre conspicua, plagulas

effusas griseo brunneas tennes formans; mycelio ex hyphis valde anastomosantibus ramosis flavo-fuscis tenuibus $2,5-4\ \mu$ crassis remote septatis saepe leniter noduloso-tortuosis composito; hyphopodiis nullis; thyrlotheeciis dense sparsis ambitu rotundatis, $90-140\ \mu$ diam. v. elongatis tunc $180-230\ \mu$ long. et $70-90\ \mu$ latis, strato simplici ex hyphis $3-4\ \mu$ crassis crebre septatis (articulis $5-8\ \mu$ longis) flavo-fuscis rectis v. fere rectis compositis, mox valde apertis, ad marginem non v. parum fimbriatis, membrana basali nulla; ascis ovato-globosis, $20-28 \times 18-22$, paraphysatis, octosporis; sporidiis ovato-oblongis, utrinque obtusis, levibus, ex hyalino fusciculis, $18-20 \times 7-8$, loculo supero parum latiore.

Hab. in foliis *Derridis diadelphae* (Leguminosae), Sampaloc prov. Bulacan, Ins. Philipp. (M RAMOS). — Ab *Asterina Derridis* P. Henn. omnino diversa. Potius *Ast. trachycarpae* Syd. proxima a qua differt sporidiis minoribus.

10. *Asterinella Loranthis* Syd., Enum. Philipp. Fungi II, in Philipp. 4904 Journ. of Sci. VIII (1913) p. 490. — Hypophylla, maculas atras irregulares plus minusve longas efformans, saepe totam folii superficiem occupans; mycelio parcissimo ex hyphis anastomosantibus parcissime septatis, flavo-brunneis vel brunneis $4-6\ \mu$ cr. composito; hyphopodiis nullis; peritheciis laxè aggregatis, rotundatis, $140-180\ \mu$ diam., subcarbonaceis, stellatim dehiscens et mox late apertis, atris, contextu radiato, olivaceo-fusco, ex hyphis breviter articulatis (articulis $6-8 \times 2,5-4$) strato simplici composito; ascis e globoso ovatis, $45-60 \times 32-45$, octosporis; sporidiis ellipsoideo-oblongis, utrinque late rotundatis, medio 1-septatis et valde constrictis, loculis facile secedentibus, mox fusco-atris, tota superficie verrucosis, $26-34 \times 14-16$; pycnidiosporis simul praesentibus, continuis, subglobosis vel ovatis, fuscis, $18-22 \times 13-15$.

Hab. in foliis vivis *Loranthi leytenensis* (Loranthaceae), Leyte, Dagami, ins. Philipp. (RAMOS). — Sporidia matura intense atra; asci interdum, ut videtur, 4-6-spори.

11. *Asterinella Anamirtae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 1905 558. — Hypophylla, plagulas irregulares tandem confluentes effusas tenerrimas formans; mycelio ex hyphis dilute fuscis $3,5-4\ \mu$ crassis flexuosis undulatis longe articulatis anastomosantibus formato; hyphopodiis nullis (passim autem oriuntur hinc inde ramuli myceliales hyphopodia simulantes); thyrlotheeciis gregariis, applanatis, $80-100\ \mu$ diam., mox late apertis, griseo-brunneis, ex hyphis rectis $3-4\ \mu$ crassis crebre septatis (articulis $5-7\ \mu$ longis) strato simplici

radiatim contextis, peripherice hyphis singulis fimbriatis, membrana basali distincta praeditis; ascis ad summas hyphas hyalinas vel subhyalinas oriundis, primo globoso-ovatis, 35-45 μ diam., dein piriformibus 50-60 \times 35-40, aparaphysatis, octosporis; sporidiis conglobatis, castaneo-brunneis, medio 1-septatis et valde constrictis, 22-25 μ longis, 9-11 μ latis, grossiuscule verrucosis, loculo supero paullo subinde majore; thyriotheciis conidiigeris similibus; conidiis subglobosis usque ovatis, continuis castaneo-brunneis, 12-16 μ longis, 11-13 μ latis.

Hab. in foliis *Anamirtae cocculi* (Menispermaceae), Angat prov. Bulacan, Ins. Philippin. (M. RAMOS). — *Aster diaphanae* (Syd.) Theiss. proxima sed omnibus partibus minori.

12. *Asterinella amazonica* Syd., Ann. Mycol. XIV, 1916, p. 92. — Hy- 4906
pophylla, plagulas parum perspicuas 1-2 cm. latas formans; mycelio laxo, ex hyphis irregulariter opposite vel alterne ramosis anastomosantibus saepe etiam lateraliter connexis fuscis 5-7 μ crassis flexuosis remote septatis composito; hyphopodiis nullis, thyriotheciis paucis in quaque plagula, inversis, hemisphaerico-lenticularibus, ambitu orbicularibus 100-160 μ diam., vel elongatis et tunc usque 250 μ longis 80-120 μ latis, vertice irregulariter dehiscens, ambitu breviter fimbriatis ex hyphis flexuosis fuscis creberrime septatis (articulis 5-7 μ longis 3 μ crassis) composito; ascis subglobosis usque ovatis, aparaphysatis, 32-40 \times 20-35, octosporis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, flavis, 20-24 \times 9-11.

Hab. in foliis *Ramisiae amazonicae* (Nyctaginaceae), Manaos, Rio Negro, Brasilia (E. ULE).

13. *Asterinella Calami* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 4907
182. — Hypophylla, irregulariter distributa, magnam folii partem occupans; mycelio perparco, ex hyphis fuscis, parce ramosis septatis (articulis 10-12 μ longis), 3-5 μ latis rectiusculis composito; hyphopodiis nullis; peritheciis inversis, irregulariter sparsis, planis, ambitu irregulariter rotundatis 250-420 μ diam., contextu ex hyphis toruloso-flexuosis copiose anastomosantibus fuscis 3-4 μ crassis composito, centro subatro opaco; ascis ovato-globosis, paucis tantum visis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, obscure brunneis, 34-35 \times 15-17.

Hab. in foliis vivis *Calami* sp. (Palmae), Palawan, Mount Capias, Ins. Philipp. (MERRILL).

14. *Asterinella lugubris* Syd., Enum. Philipp. Fungi II, in Philipp. 4908

Journ. of Sci. VIII (1913) p. 491. — Mycelio epiphylllo, tenni, plus minusve effuso, parce maculiformi, ex hyphis laxè intertextis, 3-5 μ cr., fuscis, longiusculis, ramosis, non vel parce septatis composito; hyphopodiis nullis; peritheciis sparsis, variabilibus aut rotundatis, 100-140 μ diam., aut valde elongatis, usque ad 600 \times 70-120, subinde etiam triangularibus, ambitu hyphis radiantibus cinctis, stellatim vel rima longitudinali dehiscens, pluristratosi, contextu atro, opaco; ascis ovatis vel oblongis, sessilibus, 35-50 \times 24-26, octosporis; paraphysibus numerosis, distinctis, ramosis, hyalinis, ad apicem lenissime incrassatis; sporidiis oblongis, utrinque rotundatis, medio 1 septatis, valde constrictis, levibus, tandem fuscis, 18-24 \times 8-9.

Hab. in foliis *Ixoræ philippinensis* (Rubiaceae), Luzon, Manila, ins. Philipp. (MERRILL).

15. *Asterinella distinguenda* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 492. — Mycelio amphigeno, tenni, plus minusve effuso, parce maculiformi, ex hyphis laxè intertextis, 3-5 μ cr., fuscis, longiusculis, ramosis, anastomosantibus, parce septatis composito; hyphopodiis nullis; peritheciis aggregatis, irregularibus, plerumque ellipticis vel oblongis, rarius rotundatis, 150-225 \times 100-170, ambitu hyphis radiantibus cinctis, stellatim vel rima longitudinali dehiscens, tandem plus minusve late apertis, pluristratosi, contextu atro opaco; ascis e globoso ovatis, sessilibus, 20-35 \times 15-19, octosporis, paraphysatis; sporidiis conglobatis, ovato-oblongis, medio 1-septatis et leniter constrictis, ex hyalino olivaceo-fuscis, levibus, 12-14 \times 5,5-6,5, loculo superiore plerumque latiore; pycnidiis simul praesentibus peritheciis simillimis, sporulis subrectis vel falcatis, continuis, hyalinis, 15-18 \times 1-1,5, sporophoris brevissimis, 4-6 μ longis fultis.

Hab. in foliis *Ixoræ philippinensis* (Rubiaceae), Luzon, Manila, ins. Philipp. (MERRILL). — Habitu *A. lugubri* Syd. subsimili sed notis variis distincta.

16. *Asterinella palawanensis* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 182. — Plagulas hypophyllas atras 0,5-1,5 cm. diam., orbiculares formans; mycelio ex hyphis tenuibus 3-5 μ crassis dilute fuscis parce septatis sed copiose anastomosantibus et saepe lateraliter conjunctis flexuosis composito, hyphopodiis nullis; peritheciis sparsis, rotundatis, applanato-convexis, atris, opacis, 200-350 μ diam., ad ambitum fimbriatis, contextu opaco; ascis ovatis vel oblongis, brevissime stipitatis, 45-55 μ longis, 24-34 μ latis octosporis; pa-

raphysibus numerosis, ascos superantibus, 1 μ crassis; sporidiis distichis, oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, ex hyalino fuscis, 18-24 \times 7-8,5.

Hab. in foliis *Plectronia* sp. (Rubiaceae), (socia *Balladyna velutina*), Palawan, Taytay, Ins. Philipp. (MERRILL).

17. *Asterinella creberrima* Syd., Ann. Mycol. XV, 1917, p. 247. — Hy- 4911

pophylla, effusa, totam fere folii superficiem occupans; mycelium ex hyphis fusciculis 2,5-3,5 μ latis flexuosis longe articulatis ramosis formatum; hyphopodia desunt; thyriothecia creberrime stipata, orbicularia, 70-120 μ diam.; e strato simplici hypharum recatarum ca. 2,5 μ latarum crebre septatarum fuscicularum radiatim contexta, per aetatem late aperta, peripherice hyphis longiusculis flexuosis fimbriata; asci ovato-globosi, distincte paraphysati, 35-40 \times 30-35, octospori; J +; sporae oblongae, medio vel circa medium septatae et valde constrictae, loculis fere aequalibus, vel supero parum majore, brunneae, leves, 24-26 \times 12-13; conidia ovata vel ovato-globosa, continua, obscure castanea, 16-19 \times 14-16.

Hab. in foliis *Premna* sp. (Verbenaceae), Los Baños, Laguna, Ins. Philipp. (O. F. BAKER).

18. *Asterinella saginata* Syd., Ann. Mycol. XV, 1917, p. 248. — Pla- 4912

gulas hypophyllas indeterminatas saepe confluentes effusas usque 2 cm. longas (vel ultra ?) formans; mycelium ex hyphis anastomosantibus ramosis 6-8 μ crassis rectiusculis vel flexuosis subinde torulosis obscure brunneis remote septatis haud hyphopodiatis compositum; thyriothecia gregaria, rotundata, 300-500 μ diam.; opaca, subatra, radiatim ex hyphis 3,5-4,5 μ crassis composita, stellatim dehiscencia, ambitu hyphis similibus plus minus longe fimbriata; asci ovati, paraphysati, 60-80 \times 40-60, octospori; sporae-oblongo-ellipsoideae, utrinque rotundatae, medio septatae, constrictae, leves, fuscae, 40-44 \times 20-23.

Hab. in foliis *Pinangae* sp. (?), Bulusan Volcano, Sorsogon (M. RAMOS) et *Pinangae Elmeri*, Benguet, Ins. Philipp. (E. D. MERRILL).

19. *Asterinella Gmelinae* Sacc., Notae Myc. XX, Nuovo Giorn. Bot. it. 4913

23., 1916, p. 199 (etiam sub *Asterina*). — Plagulis amphigenis, irregulariter subcircularibus 3-5 mm. lat., dilute fuligineis, laxe reticulatis; hyphis non hyphopodiatis, e perithecio radiatim divergentibus, ramulis brevibus oppositis v. alternis, sursum versis et leviter curvis utrinque acutis; peritheciis applanato-dimidiatis 160 μ diam. radiatim contextis, margine vix fimbriatis, brunneis; ascis

sphaeroideo-ellipticis 60-80 μ diam., v. 80 \times 65, suboctosporis; sporidiis tristichis, obovato-oblongis, utrinque rotundatis, levibus, 38 \times 14-16, demum 35 \times 18-19, atro fuliginis, loculo superiore paullo crassiore.

Hab. in foliis languidis, *Gmelinae* sp. (Verbenaceae), Los Baños, ins. Philipp. — *Aster Humiriae* (P. Henn.) Theiss. proxima.

20. *Asterinella quinta* (Rac.) Theiss., Broteria, Ser. Bot. X (1912) p. 105 4914

c. icon, *Asterinella quinta* Rac. in herb., Java. — Mycelio parco evanido ex hyphis tenerrimis, laete veridulo-fuscis laxè ramosis 2,5 μ cr. formato; hyphopodiis nullis; peritheciis sparsis, 100-140 μ diam. orbicularibus, applanato-scutatis, contextu viridulo-fusco, ex hyphis 4 μ cr., rectiusculis, subtorulosis, centro obscurioribus, peripheriam versus griseo-fuliginis, articulis 6-8 μ longis versus centrum brevioribus fere cubicis, 5 μ long radiato-contextis, vix fimbriatis; ascis ovato-globosis 35-45 μ diam. v. 50-60 \times 35-40, aparaphysatis, ex summis hyphis hyalinis flexuosis oriundis, 8-sporis, jodi ope nulla; sporidiis conglobatis oblongis, fuligineo-brunneis, membrana atra levi, 22-27 \times 10-12, cellula sup. latiore.

Hab. (matrix et locus omisi), in Java. — Ab affine *A. Cryptocaryae* mycelio recedit.

21. *Asterinella lepidotricha* Theiss., Ann. Mycol. XIV, 1916, p. 271. — 4915

Epiphylla, soris minutis dense irregulariterque sparsis; hyphis mycelialibus delicatulis, vix 2,5 μ crassis, absque hyphopodiis, laxè reticulato-ramosis, rectiusculis, nusquam dense contextis. Thyriotheciis orbicularibus, planis, scutatis, 100-130 μ diam., ex hyphis fusco-brunneolis, angustissimis (2-3 μ cr.), peripheriam versus subcrenulatis radiato-contextis. Ascis ovato-ellipticis, aparaphysatis, 45-50 \times 30-33, brevissime stipitatis, octosporis. Sporis conglobatis, brunneis, medio septatis et constrictis, 16-17 μ longis, cellula superiore 8 μ , inferiore 6,5 μ latis. Thyriothecia conidiifera ascigeris similia, minora, 55-70 μ diam.; conidiis brunneis, piriformibus, continuis, 19-23 \times 12-14 (*Asterostomula lepidotricha* Theiss. n. sp.,

Hab. in foliis indeterminatis, Los Baños ins. Philippinensium (S. R. REYES, comm. BACKER).

PRILLIEUXINA G. Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 4916

1918, p. 161 (etym. a Ol. ED. PRILLIEUX). — Tab. XXIX. — Stromata ut in *Dimerosporio* Fuck.; mycelio externo stigmopodiis distinctis destituto ut in *Asterinella*; mycelio interno stromatibus tantum nec mycelio externo connexo. — Huc ducenda est secund.

Auctor *Asterinella Winteriana* Pazschke. Status conidicus *Prillieuxinae Winterianae* sistit *Leprieurina Winteriana*.

HARIOTULA G. Arnaud, C. R. Ac. Sc. Paris t. 164., 1917, p. 888; Ann. 4917
École Nat. Agr. Montpellier, t. 16., 1918, p. 201, tab. XLIV. —
(Etym. a cl. mycol. HARIOT). — Est *Asterinella rhizomatica*, idest
mycelio communi incluso praedita. — Species typica *Har. Loranthei*
(Karst. et Har., ut *Olypeolum*) Arnaud.

OPASTERINELLA Spegaz., Rel. Myc. trop. in Bol. Ac. Nac. Cienc. Cordoba, t. XXIII, 1919, Extr. p. 136. — Caracteres ex tabula synoptica p. 436 relata.

1. **Opasterinella Tonduzzi** Spegaz., Fungi Costaric. nonn., in Bol. Ac. 4918
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 209. — Maculae nullae
v. vix pallescentes indeterminatae; subiculum amphigenum arachnoideum tenue laxum, ex hyphis rectiusculis alterne ramosis parce septatis, hyphopodiis nodulisque plane destitutis, efformatum; thyriothecia parva 80-100 μ diam. atra glabra, astoma, stellatim dehiscentia, margine crenulata ac fimbriatula, membrana basali destituta, hyphis tenuibus radiantibus vix undulatis composita; asci subglobosi apophysati 40-45 \times 40; sporae laeves didymae, loculis subaequalibus, fuligineae, 20-24 \times 10-12.

Hab. in foliis *Xylosmatis Salzmanni* (Flacourtiaceae), prope Carthaginem Costarica, America trop.

MAUBLANCIA Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 1918, p. 158. — Maublanc, Bull. Soc. Mycol. de Fr. t. 36., 1920, p. 39. — Perithecia, asci et sporidia ut in genere *Asterinella* Theiss. (emend. Arnaud), sed mycelium hyphopodia gerens.

1. **Maublancia Myrtacearum** Arnaud, l. c., tab. 28. — Maublanc A., l. c. p. 4919
39 fig. 3-6. — Maculis epiphyllis, orbicularibus, diffusis, 3-6 mm. diam. Hyphis brunneis, 4-6 μ crassis, crasse tunicatis, ramosis, paulum undulatis, fragilibus; hyphopodiis numerosis, bicellularibus, cellula infer. pedicelliformi, simplic v. lobata, super. lobata, 15-20 \times 12-16. Peritheciis atris, sparsis, orbicularibus, 300-450 μ diam., tunica crassa, opaca, ex hyphis radiantibus, ad marginem tortuosis pallidioribusque formata. Ascis clavatis v. subcylindricis, breviter pedicellatis, sursum rotundatis, crasse tunicatis, 70-90 \times 25-30, 8-sporis (semper 8). Sporidiis distichis, claviformibus, inaequaliter 1 septatis, 30-35 \times 14-16, cellula super. ovoidea, saepe ad apicem attenuata

(18-20 \times 14-16), infer. minore, fere conoidea, obtusa (12-14 \times 12), pallide brunneis.

Hab. in foliis vivis *Myrtaceae* ejusdam, Ipanema prope Rio-de-Janeiro, Brasiliae.

ASTEROMYXA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 419. — Mycelium superficiale exhyphopodiatum. Thyriothecia inversa, radiantia, dimidiata, poro centrali praedita, setulosa, dein mucoso-incrustata. Hymenium depressum, simplex, polyascom. Asci clavati ovoidei apophysati, octospori. Sporidia brunnea, bilocularia, elongata. — Typ. gen. *Asterom. kirtula* (Speg. ut *Dimeriella*) Theiss. et Syd. l. c. — Syll. XXII p. 37. 4920

CLYPEOLINA Theiss., Centralbl. f. Bakter., II Abt. Bd. 34., 1912, p. 234, ut sectio). — Theiss. in Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 419. — Est *Clypeolella* mycelio exhyphopodiatu donata.

1. *Clypeolina apus* (Theiss.) Theiss. in Theiss. et Syd. l. c., *Clypeolella Apus* Th. Centralbl. Bakt. II Abt. 34. (1912) p. 234. — Subiculo ex hyphis fusco-brunneis, irregulariter ramosis, 5,5-6,5 μ cr., dense junctis composito; hyphopodiis nullis; peritheciis inversis, applanato-conicis, orbicularibus, brunneis, 85-140 μ diam., vertice mox irregulariter resorpto; ascis primo cylindraceo-elongatis, maturis ellipsoideo-ventricosis, octosporis, apophysatis, 42-56 \times 22-30; sporidiis oblongo-ellipsoideis, 18-20 \times 6,5-9, griseo-brunneis, utrinque rotundatis, ad septum constrictis, loculo supero paullo latiore sed minore. 4921

Hab. in foliis *Bignoniaceae* ejusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia.

THALLOCHAETE Theissen, Ann. Mycol. XI, 1913, p. 501. — Thyriothecia superficialia, inverse radiata; mycelio ramoso, septato, setas erectas emittente. Asci octospori, apophysati. Sporae phaeodidymae.

1. *Thallochaete ingae* Theiss. l. c. p. 501, fig. IV et tab. XXI fig. VI. — Hypophylla. Mycelio arachnoideo, atro; hyphis irregulariter laxe ramosis, rectis, tenerrimis, laete brunneis, vix 3 μ cr., septis distantibus, facile hinc inde ruptis; setis mycelialibus concoloribus, erectis, basi 5 μ cr.; non geniculatis, flexuosis, septatis (cellulis 22-26 μ long.), 100-150 μ long., apice acutiusculis hyalinis, integris; thyriotheciis dense sparsis, inversis concentrice sulcatis, strato 4922

hypharum simplicium, membranaceis, applanatis, papilla centrali hemisphaerica praeditis, orbicularibus 100-180 μ v. ellipsoideis 170-250 \times 100-170, ostiolo non typico. (cellulis apicalibus parenchymaticis ruptis) rotundo v. elongato; ascis ovato-clavatis, paraphysatis, apice late rotundatis, octosporis, 28-35 \times 16-20; sporis laete coloratis, ellipsoideis, tristicis, utrinque rotundatis, 16 \times 5-6, medio septatis constrictisque, cellula superiore vix latiore; conidiis tricellularibus, utrinque truncatis, brunneis, cellula infera subhyalina, 18-22 \times 6-8. Alia conidia, forte ex hyphis mycelialibus oriunda, fusioidea, 4-cellularia, luteola, subcurvula, 22-25 \times 2,5.

Hab. in foliis *Ingae* sp. (Leguminosae), Manaos, Amazonas, Brasilia (ULE).

CLYPEOLELLA v. Höhn. — Syll. XXII p. 544 (ut Subgen.). — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 419.

1. *Clypeolella Ricini* Rac. ap. Theiss. in Centralbl. Bakt. II Abt. 34. 4923 (1912) p. 233. — *Asterina Ricini* Rac. in herb. — Amphigena griseo-atra; subiculo ex hyphis brunneis, dense ramosis, 4-5 μ cr., crebre septatis, cellulis singulis 10-30 μ longis composito; hyphopodiis unicellularibus, subglobosis, 8-10 μ diam.; conidiis 4-cellularibus, curvatis, utrinque attenuatis et apiculatis, 28-34 \times 9-11, cellulis terminalibus pallide brunneis, medianis obscurioribus; peritheciis minutissimis, nudo oculo vix conspicuis, brunneis, rotundatis vel ovoideis, 50-110 μ latis, applanatis, margine haud fimbriatis; ascis globosis, 26-28 μ diam., octosporis; sporidiis levibus, medio septatis, leniter constrictis, loculis paullo inaequalibus, diu hyalinis demum episorio brunneo, 17-20 \times 9-10.

Hab. in foliis *Ricini communis* (Euphorbiaceae), Buitenzorg, Java.

2. *Clypeolella Solani* Theiss., Centralbl. Bakt. II Abt. 34. (1912) p. 233. — 4924 Subiculo ex hyphis fuscis, undulatis, opposite vel alterne ramosis, dense intertextis, 5,5-6,5 μ cr. composito; hyphopodiis alternis, sessilibus, continuis, globosis vel hemisphaericis, integris, 8-11 μ diam.; conidiis hyphogenis 3-septatis, rectis curvulisve, 28-32 \times 12-14, cellulis mediis brunneis, extremis hyalinis minoribus, rotundatis vel acutatis; peritheciis minutis, brunneis, 35-55 μ diam., orbicularibus, applanatis, irregulariter e centro resorptis; ascis ovato-globosis, octosporis, paraphysatis, 45-55 \times 38-45; sporidiis demum castaneo-brunneis, 25-27 \times 10-13, levibus, utrinque rotundatis, cellula superiore latiore.

Hab. in foliis *Solan*i sp. (Solanaceae), São Leopoldo, Rio Grande do Sul, Brasilia.

ENGLERULASTER v. Höhn., *Fragm. z. Mykol.* 1910, n. 520. — Theissen, *Broteria*, 1914, p. 78; Theiss. et Syd., *Ann. Mycol.* XV, 1917, p. 420.

1. **Englerulaster continuus** H. et P. Sydow, *Ann. Mycol.* XII, 1914, p. 4925 201. — Amphigenus, plerumque epiphyllus, plagulas aterrimas orbiculares 2-4 mm. diam. tandem confluentes majores et irregulares formans; hyphis mycelii atro-brunneis, 6-7 μ latis, rigidulis, crebre septatis; hyphopodiis alternantibus, unicellularibus, semiglobosis, 8-12 μ latis et altis; thyriotheciis primitus plane convexis, tandem multo magis convexis, 200-300 μ diam., subopacis; ascis ovatis, aparaphysatis, 55-75 \times 40-50, octosporis; sporidiis oblongis, obscure brunneis, medio vel circa medium septatis, constrictis, levibus, 25-34 \times 12-16.

Hab. in foliis *Ilicis pedunculosae* (Aquifoliaceae), prov. Mino Kawaue-mura, Japonia (K. HARA). — *Engler. alpina* (Bac.) Theiss. proximus.

2. **Englerulaster atrides** Syd., *Ann. Mycol.* XV, 1917, p. 239. — Amphigena praecipue epiphylla, plagulas omnino irregulares minutas vel majores 2-10 mm. diam. tennes formans; mycelium laxè ramosum, ex hyphis brunneis 5,5-6,5 μ crassis rectiusculis vel flexuosis septatis (articulis 20-28 μ longis) compositum, hyphopodia sparsa, modice copiosa, continua, 10-13 μ alta vel lata, saepe latiora quam altiora, plerumque plus minus distincte bilobata (lobis crassis obtusis), ad basim saepe stipitiformiter contracta; thyriothecia conferta, subglobosa, 100-150 μ diam., radiatim ex hyphis 3-3,5 μ crassis, olivaceo-brunneolis, contexta, mox mucosa dissoluta et usque ad marginem aperta; ascis ovati vel ovato-globosi, aparaphysati, 40-60 \times 35-40, octospori; sporae oblongae, medio vel paullo supra septatae, constrictae, utrinque rotundatae, primitus anreae, maturae, aterrimae, opacae, 24-27 \times 11-12, loculo superiore plerumque leniter latiori sed brevior.

Hab. in foliis *Modeccae* (Adeniae) *coccineae* (Passifloraceae), Bataan, Luzon Ins. Philipp. (M. RAMOS).

SYMPHASTER Theiss. et Syd., *Ann. Mycol.* XIII, 1915, p. 217 et 668, 4927 XV, 1917, p. 418. — Mycelium hyphopodiatum. Thyriothecia scutata radiantia, polyasca; ascis in focolis plurimis stromate hyalino-

fibroso divisis congregati, ovoidei, aparaphysati. Sporidia brunnea didyma. — Typus generis *Symph. Gesneraceae* (P. Henn. ut *Coccocinia*) Th. et Syd.

Sect. 3. Phaeodidymae

*) **LEMBOSIA** Lev. — Syll. II p. 741, IX p. 1104, p. 387, XIV p. XIV p. 712, XVI p. 663, XVII p. 897, XXII p. 561.

1. **Lembosia Rollinae** Rehm in herb., Theissen, Ann. Mycol. XI, 1913, 4928 p. 442. — Peritheciis minutissimis $0,3-0,35 \times 0,1$ mm.; mycelio pallide brunneo, ex hyphis 5μ cr. crasse tunicatis, hyphopodiis sparsis irregulariter globosis, $5-7 \mu$, praeditis efformato; ascis e ovoideis, $50-60 \times 30$, cylindraceo clavatis, 65×25 , parce paraphysatis; sporidiis atro-brunneis $24-26 \times 10-11$, levibus, loculis subinaequalibus.

Hab. in *Rollinia* sp. (Anonaceae), in Brasilia merid. (ULE). — Proxima *Lemb. Warscewicziae* P. Henn.

2. **Lembosia Pothoidi** Rehm, Ascomyc. Philipp. I, in Philipp. Journ. 4929 of Sci. VIII (1913) p. 191. — Mycelio epiphylo, effuso, arachnoideo, arcte adnato, ex hyphis fuscis, septatis, 5μ cr., ramosis, hyphopodia pauca subglobosa 1-cellularia $7-8 \mu$ cr. gerentibus formato, plagas nigritulas usque ad 2 cm. diam., orbiculares, centro demum peritheciis creberrimis obsessas, ambitu vix conspicuas figurante; peritheciis primitus sparsis, dein plus minusve arcte congregatis, atris, carbonaceis, glabris, raro orbicularibus, plerumque elongatis, utrinque obtusis, rectis, $400-500 \mu$ longis, 300μ latis, apice longitudinaliter vel stellatim rimose dehiscentibus, pseudoprosenchymatice centrifuge contextis, radiatim in mycelium basale transeuntibus; ascis ovoideis, crasse tunicatis, ca. 80×40 , octosporis; paraphysibus nullis nisi stratum intermedium hyalinum; sporidiis ovoideis. medio aut paullulum inferius septatis, subconstrictis, hyalinis dein brunneis, $25-27 \times 12$. Adsunt conidia oblonga recta vel subcurvata, continua, fusca, $30 \times 6-7$, ut in *Lembosia Cassupae* P. Henn.

Hab. in foliis *Pothoidi* (Araceae), Luzon, Prov. Laguna, Mt. Maquiling, ins. Philipp. (C. F. BAKER). — Affinis *L. decalvanti*

*) Characteres gen. secundum THEISSEN (*Lembosia-Studien*, Ann. Mycol. XI, 1913, p. 427); Mycelium superficiale, hyphis ramosis, septatis hyphopodiatis. Thyriotheca dimidiato scutata, inversa (nucleo anatrop.), radiato-prosenchymatica, stratoza, typica oblongo linearia, rima longitudinali irregulari dehiscentia. Asci paraphysati, octospori. Sporidia phaeodidyma.

Pat. a. qua forma et dispositione peritheciolorum distinguitur.

3. *Lembosia Heptapleuri* Sacc., Notae Mycol. XXIV p. 14 (Bull. Orto botan. Nap. 1918). — Peritheciis epiphyllis, superficialibus, laxe gregariis undique versis, mycelio subcuticulari parco suffultis, anguste lanceolatis v. sublinearibus, 300-1000 \times 100-120, nigris, rima angustissima longitudinali dehiscens, toto ambitu ad basim hyalino-denticulatis; ascis dense parallele stipitatis, paraphysibus apice brunneo-grumosis obvallatis, tereti-oblongis, circ. 40 \times 12, octosporis; sporidiis oblique monostichis, oblongis, utrinque rotundatis, medio constricto 1-septatis, 16 \times 5, diu hyalinis, dein fuscis.

Hab. in foliis morientibus, e subiculo innato leviter atratis, *Heptapleuri* sp. culti (Araliaceae), Singapore (BAKER).

4. *Lembosia modesta* Theissen, Ann. Mycol. XI, 1913, p. 511. — Hyphis mycelii irregulariter radiantibus, laeticoloribus, tenerrimis, 3 μ cr., alternis laxe ramosis; hyphopodiis sparsis minutis globosis, 5-6 μ diam.; thyriotheciis elongatis, 170-250 \times 60-90. inversis, radiatis, hyphis fuligineo-brunneis delicatis 2-3 μ cr. contextis, opacis; ascis ovoideis 30-40 \times 20-24, octosporis; sporis brunneis, laevibus utrinque rotundatis, 12-14 \times 7, medio septatis et constrictis; paraphysibus filiformibus, ascos superantibus, non conglutinatibus, apice vix incrassatis.

Hab. hypophylla in foliis *Araucariae brasiliensis* (Coniferae), Serra Geral, Brasiliae (ULE). — Soc. *Pseudomeliola brasiliensi* Speg. Affinis *Lemb. microtheceae* Theiss. a qua differt forma hyphopodiorum et modis sporarum.

5. *Lembosia glonioidea* Sacc., Notae Mycol. XXIV p. 15 (Bull. orto bot. Napoli 1918). — Peritheciis dense gregariis, lanceolatis, atris, membranaceis, simplicibus, non raro 2-3-radiatis, diu epidermide subtectis, demum erumpenti-subsuperficialibus, 330-600 \times 90, laciniis epidermidis limitatis, latiuscule rimosis; ascis tereti-clavatis, apice rotundatis, brevissime stipitatis, 45-50 \times 6-6,5, pseudo-paraphysibus epithecium fuscillum formantibus; sporidiis oblique monostichis, oblongis, 8-9 \times 3, constricto-1-septatis, dilute fuligineis, loculo superiore paullo crassiore et obtusiore.

Hab. in ramulis emortuis subputrescentibus, corticatis *Heveae brasiliensis* (Euphorbiaceae) cultae, Singapore (BAKER). — Asci marginales minores, inanes, paraphysioidei. Subiculo deficiente v. obsoleto ad gen. *Lembosinam* neotericorum spectaret. Videretur quoque *Glonium* minutum phaeodidymum.

6. *Lembosia decolorans* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 561. —

Epiphylla, matricem decolorans et maculas orbiculares v. confluyendo irregulares 3-10 mm. diam. fuscidulas efficiens; mycelio perparco, vix visibili, ex hyphis tenuibus 3-4 μ latis ramosis parce hyphopodiatis composito; hyphopodiis subglobosis, continuis, 4-5,5 μ longis; thyriotheciis paucis in quaque macula, elongatis, 300-450 μ long. 140-170 μ latis, atris, opacis, ex hyphis, ca. 3-4 μ crassis radiatim compositis, tandem rima lata apertis; ascis ovato-oblongis, copiose paraphysatis, superne crasse tunicatis, 40-55 \times 16-22, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis et non v. vix constrictis, ex hyalino fuscidulis, levibus, 13-16 \times 5,5-7, distichis usque tristichis.

Hab. in foliis *Quercus ovalis* (Fagaceae), Sampaloc pr. Bulacan, Ins. Philippin. (M. RAMOS), in consortio *Trichothyrii orbicularis* Syd.

- 7 *Lembosia nervisequa* Syd., Philipp. Journ. of Sc. Bot., IX, 1914, 4934 p. 183. — Amphigena, praecipue nervos sequens, plagulas atras plus minus elongatas confluentes formans; mycelio parco, ex hyphis fuscis vix septatis 5-7 μ crassis anastomosantibus flexuosis composito; hyphopodiis nullis vel saltem non visis; peritheciis densiuscule dispositis, primitus rotundatis 200-300 μ diam., dein elongatis 300-550 μ longis 150-180 μ latis, rima longitudinali dehiscenibus, contextu centrali atro-fusco opaco marginem versus fusco ex hyphis rectis 4-4,5 μ crassis (articulis 8-11 μ longis) composito; ascis globoso-ovatis, parce paraphysatis, 50-58 \times 40-46, octosporis; sporidiis conglobatis, ellipsoideis, utrinque late rotundatis, medio 1-septatis, vix vel leniter constrictis, minutissime verruculosis, ex hyalino sordite olivaceis, 23-26 \times 12-13.

Hab. in foliis vivis *Litsea* sp. (Lauraceae), Palawan, Taytay, Ins. Philipp. (MERRILL).

8. *Lembosia hormosiana* Sacc., Notae Mycol. XXIV p. 14 (Bull. Orto bot. Nap. 1918). — Epiphylla, tenuissima, superficialis; subculo adpresso intricato-ramoso fuligineo, hyphis 3,5-4 μ cr., hyphopodiis oblongis, obtusis, 7-10 \times 3, praeditis; peritheciis lanceolatis, applanatis, 235-400 \times 90, nigris, longitrorsum latiuscule rimosis, ambitu ad basim pilis septulatis fuligineis 45 \times 3-4 remotiusculis ornatis; ascis fasciculatis ovato-ellipsoideis subsessilibus 35-40 \times 18-20, oligosporis, aparaphysatis; sporidiis conglobatis, obovatis, bilocularibus, constrictis, 16-17 \times 6-6,5, diu hyalinis, dein brunneis, guttulatiss, cellula super. paullo crassiore.

Hab. in foliis morientibus *Hormosiae sumatranae* cul-

tae (Leguminosae), Singapore (BAKER). — Perithecia innituntur hypothallo subradiato cellulis superne opacis.

9. *Lembosia Melastomatum* Mout. — Syll. II p. 742 — var. *Puttemansii* 4936
G. Arnaud, Ann. École Nat. Agriculture Montpellier t. 16., 1918, p. 133. — A typo recedit sporidiis vix crassioribus, $27,5 \times 13,5$, nec $28 \times 12,5$ et austoriis in parte intraepidermica minus inflatis.

Hab. in foliis *Melastomataceae* ejusdam, Aqua Branca prope Sao Paulo, Brasiliae (A. PUTTEMANS). — var. *Maublancii* G. Arnaud, l. c. p. 134, tab. XIX. — A typo recedit austoriis tantum in epidermide sitis. — *Hab.* in foliis *Melastomataceae* ejusdam, Caraga Minas Geraes, Brasiliae (A. MAUBLANO).

10. *Lembosia miconiicola* G. Arnaud, Ann. École Nat. Agricult. Mont- 4937
pellier, t. 16., 1918, p. 131, tab. XVII et fig. 20. — *L. Melastoma-*
tum var. *microspora* Theissen, Lembosia Studien 1913, p. 438. —
Maculis nigris 2-3 mm. latis epiphyllis; mycelio externo stigmo-
podiis paucis globosis, unilocularibus donato, interno bene evoluto,
ramoso, austoriis coralloideis numerosis praedito; stromatibus ma-
gnitudine variabilibus, plerumque 0,5-0,8 mm., saepe confluenti-
bus; ascis ovoideis ventricosis, octosporis contextu paraphysoides
obvallatis; sporidiis bilocularibus brunneis, circ. $22 \times 11,5$.

Hab. in foliis *Miconiae stenostachyae* (Melastoma-
taceae), Tarapoto Peru, America austr. (E. ULE).

11. *Lembosia Eugeniae* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4938
of Sci. VIII (1913) p. 261. — Mycelio epiphylo, plagas orbiculares
0,5-1,5 cm. latas, nigricantes, haud distincte marginatas, dilute ci-
nereo-fusculas, arcte adnatas formante, demum late effuso; hy-
phis mycelii nudo oculo haud conspicuis, gracilibus, sparse utrin-
que ramosis, septatis, $3-4 \mu$ cr., hyphopodia cylindracea, unilate-
ralia, ? 2-cellularia, fusca, recta, $10 \times 2,5$ gerentibus; peritheciis spar-
sis, sessilibus, atris, glabris, rectis, linearibus vel subfusiformibus,
rimose dehiscens, $150-200 \mu$ longis, 100μ latis, centrifuge con-
textis, ad basim in mycelium radiantibus; ascis ovoideis, octospo-
ris, filiformi-paraphysatis, 60×30 ; sporidiis oblongis, utrinque ro-
tundatis, rectis, medio septatis et constrictis, demum fuscis, $20-22$
 $\times 8-9$, halone mucosa 5μ lata obductis.

Hab. in foliis *Eugeniae* (Myrtaceae), Luzon, Prov. Laguna,
Los Baños, ins. Philipp. (C. F. BAKER). — Affinis *L. decalvanti* fm.
Coccoli Pat.; differt characteribus mycelii et peritheciis omnino
sparsis.

12. *Lembosia microcarpa* Syd., Ann. Mycol. XV, 1917, p. 248. — Pla- 4939

gulas primitus orbiculares dein confluyendo irregulares effusas formans, mycelium sat copiosum, ex hyphis undulatis 2,5-3,5 μ crassis remote septatis copiose ramosis fuscidulis haud hyphopodiatis nec nodulis compositum; thyriothecia laxe gregaria, minuta, sed elongata 200-400 μ longa, 50-100 μ lata, recta vel saepe curvata, rima longitudinali dehiscentia, contextu radiato opaco, ambitu hyphis 2-3 μ crassis iis mycelii similibus copiose fimbriata; asci ovati vel ovato-globosi, paraphysati, 23-27 \times 16-20, octospori; sporae oblongae, utrinque rotundatae, medio septatae et vix vel leniter contractae. fuscae, leves, 11-14 \times 4-5 μ .

Hab. in foliis *Calami* sp. (Palmae), Bataan, Luzon, Ins. Philipp. (M. RAMOS).

13. *Lembosia Pandani* (Rostr.) Theiss., Ann. Mycol. XI, 1913, p. 457, 4940
Asterina Pandani Rostr. — Sacc. Syll. XVII p. 881. — Syn. *Lemb. Pandani* Rehm, Ascom. Philippin. VII, in Leaflet of Philipp. Bot. VIII, 1916, p. 2932.

Hab. in pag. sup. foliorum *Pandani Copelandi* emortuorum (Pandanaceae), Paete, ins. Philippin. (BAKER). — Perithecia initio circulari-oblongula, fere asterinacea, mox vero anguste lanceolata, 0,5 mm. longa, 100 μ lata, rimosa. Asci 28-30 \times 24-26, octospori; sporidia didyma, 20-22 \times 9-10, diu hyalina, dein mellea, tandem brunnea. — *Lemb. Coccoes* Rehm, forsitam modo matrice diversa. Etiam *Lemb. crustacea* (Oke.) Th. aegre distinguenda.

14. *Lembosia Pavettae* Theiss., Ann. Mycol. XI, 1913, p. 429, t. XX 4941
 fig. 28. — Plagulis plerumque epiphyllis, nigris 1 mm. latis in mycelium laxum ramosum periphaerice desinentibus; hyphopodiis brunneis sparsis, depresso subglobosis 5-7 μ cr.; peritheciis dense congregatis, superficialibus, ex hyphis radiantibus 4 μ cr. efformatis; ascis dense paraphysatis (paraphysibus ascos superantibus simplicibus v ramosis apice vix incrassatis), octosporis subelavatis usque 65 \times 10-12, J. ope disco ascigero intense cyaneo paraphysibus flavo-brunneis; sporidiis demum distichis, oblongis, 18-21 \times 6-8, brunneis, loculo superiori plerumque breviori et latiori.

Hab. in foliis *Pavettae indicae* (Rubiaceae), Peradeniya Ceylon (T. PETCH). — var. *luzonensis* Syd., Ann. Mycol. XV, 1917, p. 249. — Epiphylla, plagulas minutas vel majores usque 1 cm. diam. formans; mycelium ex hyphis densissime intertextis, ramosis anastomosantibus saepe connatis brunneis irregularibus 3-5 μ crassis remote septatis formatum; hyphopodia parcissime evoluta, hemiglobosa, 5-7 μ diam.; thyriothecia gregaria, oblonga vel trigona aut

linearia, 300-600 μ longa, 180-250 μ alta, alte convexa, aterrima opaca, ex hyphis 2,5-3 μ latis contexta; asci ovato-oblongi, 35-50 \times 20-25, octospori; paraphyses copiosissimae, hyalinae, ascos superantes, superne haud incrassatae; sporae oblongae vel oblongo-ellipsoideae, utrinque rotundatae, medio septatae et leniter constrictae, leves, ex hyalino fuscidulae, 18-21 \times 7-9, cellula superiore saepe leniter latiore, sed brevior.

Hab. in foliis *Pavettiae* sp. (Rubiaceae), Rizal Luzon, Ins. Philipp. (M. RAMOS).

15. *Lembosia philippinensis* Syd., Ann. Mycol. XV, 1917, p. 249. — *Am-* 4942
phigena, plagulas orbiculares, usque 1 cm. diam. dein confluyendo saepe irregulares formans; mycelium ex hyphis dense intricato-ramosis fuscis 2,5-4 μ crassis remote septatis haud hyphopodiatis compositum; thyriothechia laxe gregaria, mox elongata, 250-600 μ longa, 150-190 μ lata, rarius trigona, rima longitudinali dehiscentia, radiatim contexta, contextu opaco, ambitu saepe parum fimbriata; asci ovati vel oblongo-ovati, 35-46 \times 20-24, octospori; paraphyses copiose, ad apicem plerumque lenissime dilatatae; sporae oblongae, utrinque rotundatae, medio septatae et constrictae, leves, brunneae, 17-19 \times 6-7.

Hab. in foliis *Randiae* (?) sp. (Rubiaceae), Bataan Luzon, Ins. Philipp. (M. RAMOS).

16. *Lembosia Rubiacearum* G. Arnaud, Ann. Ecole Nat. Agriculture 4943
 Montpellier, t. 61., 1918, p. 135, tab. XX. — Maculis epiphyllis parum visibilibus, 2-3 mm. diam.; mycelio externo parum copioso stigmopodiis globosis v. plus minus deformibus praedito; mycelio interno austoriis racemosis epidermicis donato; stromatibus ellipsoideis 400 μ circ. long.; ascis ovoideis; sporidiis 21,5 \times 14,5, biocularibus, brunneis.

Hab. in foliis *Rubiaceae* cujusdam, loco?, America merid. (ULE).

17. *Lembosia inconspicua* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4944
 p. 183. — Epiphylla, plagulas tenuissimas vix conspicuas 2-8 mm. latas formans; mycelio ex hyphis dilute fuscis dense ramosis septatis irregularibus 3-4 μ crassis composito; hyphopodiis rarissimis, continuis, brevissimis; peritheciis sparis vel laxe aggregatis, anguste oblongis usque linearibus, plerumque 150-350 μ longis et 100-150 μ latis, subinde valde elongatis et tunc usque 1 mm. longis, tenuibus, rectis vel subrectis, opace, atris, rima longitudinali latiuscula apertis, contextu opaco atro ex hyphis tenuibus rectis

vel subrectis ca. 2 μ crassis composito; ascis ovatis, apice late rotundatis et incrassatis, sessilibus, 26-32 \times 14-20; paraphysibus copiosis, superne leniter incrassatis, obtusis, ad apicem 2-2,5 μ latis, hyalinis; sporidiis octonis, conglobatis, elongato ovatis, levibus; ex hyalino tandem fuscis, 11-15 \times 3,5-5, loculo superiore globuloso; inferiore angustiore et longiore, ad septum non vel vix constrictis.

Hab. in foliis *Guioa* sp. (Sapindaceae), Palawan Taytay, Ins. Philippin. (MERRILL).

MAURODOTHELLA G. Arnaud, Ann. Ecole Nat. Agricult. Montpellier t. 16, 1918, p. 124 (Etym. a gen. *Maurodothis* quia affinis). — A gen. *Lembosia* stigmopodiis et stigmocystis nullis tantum differt. — Ex duob. subgen. sistit: *Eu-Maurodothella* Arn., sporidiis aequaliter brunneis, *Maurodothina* Arn. sporidiis brunneis sed duobus zonulis hyalinis donatis.

1. **Maurodothella Psychotriae** G. Arnaud, l. c. p. 125, tab. XIII. — Ma- 4945
culis parvis 1-2 mm. diam. epiphyllis (an semper?); mycelio externo parum visibile et copioso; stromatibus in centro macularum irregulariter dispositis quandoque distincte radiantibus 0,65-0,9 mm. long.; ascis ovoideo-oblongis, octosporis, contextu paraphysioideo copiose obvallatis; sporidiis bilocularibus obscure brunneis, 30 \times 14,5-15. Mycelio externo brunneo, ramoso, stigmatocistis nullis; mycelio interno copioso, inter epidermide et mesophyllo orto, austoriis coralloideis praedito.

Hab. in foliis *Psychotria* sp. (Rubiaceae), Rio Maña, America austr. (E. ULE).

CIRSOSIA G. Arnaud, Ann. École Nat. Agricult. Montpellier t. 16., 1918, 4946
p. 127. (Etym. e *cirsos* = varix, quia mycelio varicoso ex stigmocystis inflatis). — Stroma ut in *Lembosia*; mycelio aereo brunneo, stigmocystis inflatis et filamentis donatis praedito, contextu paraphysioideo praesenti. Huc pertinet *Lembosia manaoensis* P. Henn. et tunc *Cirs. manaoensis* (P. Henn.) Arnaud vocanda.

CIRSOSIELLA G. Arnaud, Ann. Ecole Nat. Agriculture Montpellier, t. 4947
16, 1918, p. 127. — Est *Cirsosia* contextu paraphysioideo destituta. Gen. *Morenoëlla* etiam affine. — Huc ducendae sunt sec. Arnaud: *Morenoëlla transversalis* (Syd.) Th., *irregularis* (Syd.) Th. nec non *Lembosia globulifera* Pat.

ECHIDNODES Theiss. et Sydew, Ann. Mycol. XV, 1917, p. 422. — Est 4948

Lembosia exhyphopodiata. — Typ. gen. *Echid. Litsuræ* (Oke. ut *Anulographum*), *E. baccharidincola* (Rehm ut *Lembosia*) Th. et Syd., *E. Bromaliacearum* (Rehm) Th. et Syd., *hypophylla* Syd., *Vrieseae* (v. Höhn. ut *Lembosia*) Th. et Syd. (= ? *Micropeltis Vrieseae* Rehm).

ECHIDNODELLA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 422. — Est

Morenoëlla exhyphopodiata.

1. *Echidnodella linearis* (Syd.) Syd. in Th. et Syd., Ann. Mycol. XV, 4949

1917, p. 422, *Morenoëlla linearis* Syd., Ann. Mycol. l. c. p. 250. — Hypophylla, plagulas irregulares tennes saepe confluentes et plus minus effusas formans; mycelium copiose evolutum, ex hyphis copiose anastomosantibus varie ramosis undulatis fusciculis 2,5-3 μ latis hand hyphopodiatis compositum; thyriothecia laxè aggregata, exacte linearia, $\frac{1}{2}$ -1 $\frac{1}{2}$ mm. longa, 100-150 μ lata, rima angustissima aperta, recta, curvata vel geniculata, opaca, radiatim contexta, ambitu copiose fimbriata et in mycelinum abeuntia; asci clavati vel saecati, sessiles ad apicem rotundati et incrassati, 30-35 \times 14-16, octospori, aparaphysati; sporae oblongae, angustae, circa medium 1-septatae, ex hyalino olivaceo-brunneae, 11-13 \times 3-4.

Hab. in foliis *Cynomatrae* sp. (Leguminosae), Samar, Ins. Philipp. (M. RAMOS).

MORENOËLLA Speg. — Syll. IX p. 1094, XVI p. 653.

1. *Morenoëlla Memecyli* Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4950

p. 183. — Peritheciis hypophyllis, in mycelio parciissime evoluto ex hyphis ramosis vix vel parce septatis fusciculis 3,5-4,5 μ crassis levibus composito hand hyphopodiato (hyphopodiis saltem non visis) insidentibus, superficialibus, primitus orbicularibus, tandem elongatis, 200-450 μ longis, 120-160 μ latis, plerumque rectis, rima latiuscula dehiscens, contextu opaco ex hyphis radiantibus obscure brunneis 3-3,5 μ crassis crebre septatis (articulis 7-9 μ longis) composito; ascis subglobosis vel ovatis, rarius leniter elongatis, aparaphysatis, 35-55 μ longis, 26-35 μ latis, octosporis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, leniter constrictis, levibus, ex hyalino fuscis, 20-23 μ longis, 8-10 μ latis, cellula superiore parum latiore quam inferiore.

Hab. in foliis *Memecylonis lanceolati* (socio *Dictyothyrio giganteo* Speg.), Palawan, Taytay, Ins. Philipp. (MERRILL).

2. **Morenoëlla Anisopterae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4951

560. — Epiphylla, plagulas orbiculares 3-10 mm. diam. formans; mycelio laxo, ex hyphis obscure brunneis 6-8,5 μ latis rectis opposite ramosis nodos gerentibus composito; nodis crassis, hemisphaerice prominentibus, 10-14 μ diam.; thyriotheciis laxe gregariis, ex rotundato mox ellipticis usque linearibus, 500-800 μ long. 350-450 μ latis, alte convexis, ambitu plus minus fimbriatis, opacis, ex hyphis rectis 4-5,5 μ crassis (articulis 10-14 μ long.) composito; ascis globosis usque ovatis, aparaphysatis, oct sporis, 45-65 \times 35-50; sporidiis medio v. infra medium septatis, non v. parum constrictis, brunneis, 28-36 \times 17-20, levibus, loculis aequalibus v. superiore leniter majore.

Hab. in foliis *Anisopterae thuriferae* (Dipterocarpaceae), prov. Rizal, Ins. Philippin. (M. RAMOS).

3. **Morenoëlla anisocarpa** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4952

559. — Epiphylla, plagulas rotundatas 2-8 mm. latas efformans; mycelio ex hyphis radiantibus ramosis anastomosantibus obscure brunneis 6-8 μ crassis hand hyphopodiatis sed nodos gerentibus composito; nodis hemisphaericis v. globosis, 10-15 μ diam.; thyriotheciis densiuscule dispositis, primitus rotundatis et 350-500 μ diam., tandem elongatis 500-1000 μ longis, 250-350 μ latis alte convexis, opacis, ex hyphis 4-5 μ latis composito, ambitu fimbriatis; ascis globosis v. ovato-globosis, 65-80 \times 50-70, octosporis, aparaphysatis; sporidiis conglobatis, ovato-oblongis, ex hyalino sordide brunneis, levibus, infra medium septatis et leniter v. magis constrictis, totis 36-40 μ longis, loculo superiore majore et latiore 22-26 \times 20-24, inferiore minore, 12-16 \times 16-20, plerumque latiore quam longiore.

Hab. in foliis *Hopeae plagatae* (Dipterocarpaceae), Angat prov. Bulacan, Ins. Philippin. (M. RAMOS). — *Mor irregularis* (Syd.) Theiss. proxima sed differt praecipue sporidiis inaequaliter septatis.

4. **Morenoëlla Ramosi** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 560. — 4953

Hypophylla, greges 0,5-1,5 cm. latos efformans; mycelio parco, radiante, ex hyphis opposito-ramosis, saepe anastomosantibus fuscis 4,5-6,5 μ latis hyphopodiis destitutis composito; thyriotheciis laxe ordinatis, ellipticis, oblongis v. subinde trigonis, opacis, marginem versus dilutioribus, convexis usque 1 mm. longis, 250-400 μ latis, contextu ex hyphis 4-6 μ latis (articulis 7-10 μ longis) rectis composito; ascis ovato-globosis, aparaphysatis, 50-75 \times 40-60, 6-8 spo-

ris; sporidiis conglobatis, ellipsoideis utrinque late rotundatis, medio 1-septatis et valde constrictis, minutissime verruculosi, in maturitate opace brunnei, 32-38 \times 17-20.

Hab. in foliis *Pentacmes contortae* (Dipterocarpaceae), prov. Rizal, Ins. Philippin. (M. RAMOS).

5. *Morenoëlla Bakeri* Syd., Ann. Mycol. XV, 1917, p. 260. — Epiphylla, 4954
 plagulas densas orbiculares vel irregulares 2-10 mm. diam. formans; mycelium densissime intertextum, ex hyphis obscure castaneo-brunneis 7-9 μ crassis copiose breviterque ramosis anastomosantibusque septatis compositum; hyphopodia ad hyphas dense intertextas tantum copiose evoluta, hemisphaerico-globosa, continua, integra, 15-20 μ diam., thyriothecia circinatim denseque disposita, primitus orbicularia, dein oblonga, 400-700 μ longa, 200-320 μ lata, radiatim ex hyphis rectis 4-5 μ crassis opacis contexta, ad ambitum hyphis 7-9 μ crassis fimbriata, rimose dehiscentia; asci paraphysati, globosi vel ovato-globosi 60-70 \times 45-65, octospori; sporae ellipsoideae vel ovatae, utrinque late rotundatae, medio, vel paullo infra medium septatae, vix vel leniter constrictae, leves, sordide olivaceo-brunneae, 34-42 \times 18-24.

Hab. in foliis *Shorea* sp. (Dipterocarpaceae), pr. Paete, Laguna, Ins. Philipp. (C. F. BAKER).

6. *Morenoëlla Beilschmiediae* H. S. Yates, Philipp. Journ. Sc. XII, 4955 (1917) p. 373. — Hypophylla, plagulae totum folium plus minusve occupantes; mycelio parcissime evoluta, ex hyphis radiantibus ramosis anastomosantibus brunneis 3-5 μ crassis composito, peritheciis numerosis, primitus orbicularibus, tandem elongatis, 400-600 \times 100-150, rima latiuscula dehiscentibus, contextu ex hyphis radiantibus obscure brunneis 3-5 μ latis composito; ascis ovatis, 36-45 \times 25-30, octosporis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, vix constrictis, laevibus, hyalino-fuscis, 25-30 \times 6-7, cellula superiore parum latiore quam inferiore.

Hab. in foliis *Beilschmiediae nervosae* (Lauraceae), Catubing River, Samar, Ins. Philipp.

7. *Morenoëlla lagunensis* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4956 560. — Epiphylla, maculas atras orbiculares 0,6-1 cm. diam. formans; mycelio radiante, ex hyphis obscure brunneis reticulato-ramosis 5,5-7 μ crassis composito; hyphopodiis paucis, clavato-capitatis, alternantibus, 13-15 μ long., cellula basali brevi, superiore late rotundata 9-11 μ lata, concoloribus; thyriotheciis numerosis in quaque plagula, oblongis usque linearibus, 250-500 μ long.

120-200 μ latis, opacis, rima longitudinali dehiscentibus, ex hyphis obscure brunneis ca. 4,5-5 μ cr. prosenchymatice radiatim contextis, ambitu fimbriatis; ascis aparaphysatis, ovatis, 40-50 \times 28-35, octosporis; sporis oblongis, medio 1-septatis et constrictis, ex hyalino brunneis, levibus, 20-23 \times 10-11.

Hab. in foliis *Neolitseeae* sp. (Lauraceae), Mt. Maquiling prov. Laguna, Luzon, Ins. Philippin. (P. W. GRAFF).

8. *Morenoëlla Fagraeae* Syd., Ann. Mycol. XV, 1917, p. 251. — Plagulas 4957 epiphyllas irregulares tenues parum perspicuas usque 1 cm. latas formans; mycelium parum evolutum, ex hyphis brunneolis tenuibus 2,5-3,5 μ crassis ramosis haud hyphopodiatis compositum; thyriothecia laxè disposita, recta vel flexuosa, linearia, 400-800 μ longa, 100-150 μ lata, rima longitudinale dehiscentia, contextu atro opaco ex hyphis 3-4 μ crassis composito; asci oblongi vel clavulati, aparaphysati, apice incrassati, 28-35 \times 13-16, octospori; sporae distichae, oblongae, utrinque rotundatae, fuscae, leves, medio septatae et leniter constrictae, 12-14 \times 4,5-5,5.

Hab. in foliis *Fagraeae racemosae* (Loganiaceae), San Antonio, Laguna, Luzon, Ins. Philipp. (M. RAMOS).

9. *Morenoëlla samarensis* Syd., Ann. Mycol. XV, 1917, p. 250. — E- 4958 piphylla, plagulas minutas orbiculares 1-3 mm. diam. formans; mycelium parce evolutum, ex hyphis laxè ramosis anastomosantibusque brunneis 4 μ crassis compositum; hyphopodia rara, solitaria, continua, integra vel subinde leniter lobata, saepe depressa, 5-7 μ lata; thyriothecia gregaria, oblonga vel linearia, 250-800 μ longa, 150-200 μ lata, radiatim et hyphis 2,5-3 μ crassis omnino opacis contexta, ambitu hyphis similibus sed flavo-brunneis plerumque copiose fimbriata, rima angusta aperta; asci aparaphysati, ovato-oblongi vel oblongi, ad apicem crasse tunicati, 38-44 \times 20-24, octospori; sporae oblongo-ovatae, utrinque rotundatae, medio septatae, leniter constrictae, leves, in maturitate fuscae, 16-18 \times 6-7.

Hab. in foliis *Stephaniae* sp. (Menispermaceae), Catubig River, Samar, Ins. Philipp. (M. RAMOS).

10. *Morenoëlla Mollinediae* G. Arnaud, Ann. Ecole Nat. Agriculture 4959 Montpellier t. 16., 1918, p. 137., tab. XXI. — *Lembosia Myrtacearum* Theiss. nec Speng. — Maculis epiphyllis 1-2 mm. diam.; mycelio externo parum copioso alterne ramoso et stigmodiis plerumque alterne dispositis elongatis saepe contortis praedito; austoriis racemosis; stromatibus 400 μ long., saepe confluentibus et tunc longioribus, parietibus tenuibus donatis; ascis ovoideis, contextu

paraphysioideo nullo; sporidiis bilocularibus brunneis, angustis, $17 \times 6,5$.

Hab. in foliis *Mollinediæ elegantis* (Monimiaceæ), Sao Leopoldo, Brasiliæ (RICK, Fungi austro-americani n. 262).

11. *Morenoëlla tenuis* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 560. — 4960

Epiphylla, plagulas orbiculares v. irregulares saepe parum definitas formans; mycelio parco, ex hyphis undulatis obscure brunneis $4-5 \mu$ crassis anastomosantibus composito; hyphopodiis modice numerosis, plerumque alternantibus, rarius oppositis, cylindraceis, $10-13 \mu$ longis, $4,5-5,5 \mu$ latis, rectis v. cellula superiore leniter curvata, obtusis; thyriotheciis laxè aggregatis, linearibus, $400-800 \mu$ long. $150-200 \mu$ latis, alte convexis, opacis, contextu ex hyphis flexuosis $3-3,5 \mu$ crassis composito; ascis primitus ovato-globosis et $35-40 \times 30-35$, dein crasse cylindraceis usque 75μ longis $25-30 \mu$ latis, octosporis, apapophysatis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio septatis et constrictis, brunneis, levibus, $23-26 \times 10-12$.

Hab. in foliis *Eugeniæ* sp. (Myrtaceæ), Angat prov. Bulacan, Ins. Philippin. (M. RAMOS). — *Mor. Myrtacearum* Speg. proxima sed hyphopodiis obtusioribus et brevioribus sporidiis majoribus præcipue diversa.

MORENOINA Theiss., Ann. Mycol. 12., 1913, p. 434; 15., 1917, p. 417. — 4961

Est *Morenoëlla* mycelio distincto superficiale destituta. — Typ. gen.

Mor. antarctica (Spegaz.), nec non verisimiliter, *australis* (Speg.), *microscopica* (Speg.), *Curatellæ* Starb., *Lembosia lucens* (Harkn.). etc.

SEYNESIELLA G. Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 4962

1918, p. 202, tab. XLV (Etym. e *Seynesia* cui analogum gen.). — Rhizomatica; stroma cum mycelio interno hic inde connexo; asci erecti, contextu paraphysioideo; sporidia bilocularia, brunnea.

Spec. typica *Seyn. Juniperi* (Desm. in *Dothidea*) G. Arnaud.

Sect. 4. Hyalophragmiæ

HALBANIELLA Theiss., Ann. Mycol. XIV, 1916, p. 430. — Theiss. et 4963

Syd., l. c., XV, 1917, p. 421. — Mycelium liberum superficiale, septatum, brunneum, radians, exhyphopodiatum. Thyriothecia superficialia inversa, radiato-contexta, dimidiata. Asci parce apapophysati, octospori, clavati. Sporidia hyalina, levia, $4-5$ locularia. — Typ. gen.

Halbaniella javanica (Rac. ut *Heterochlamys*) Theiss. l. c. — Verisimiliter huc spectat etiam *Zignoëlla ovoidea* Sacc., sec. v. Höhnelt, Ann. Myc. XVIII, 1920, p. 79.

DOTHITHYRELLA v. Höhnelt, Ann. Mycol. 16., 1918, p. 171. — Hypo- 4964
stroma in cellulis epidermicis nidulans, brunneum; hypostroma ascigerum superficiale, tenne hinc inde adnatum; mycelium liberum nullum. Loculi rotundati v. depressi stratu proprio sentiforme brunneo tecti et stratu basali hyalino praediti. Pars stromatica sterilis e cellulis seriebus parallele dispositis efformata. Paraphyses filiformes, saepe nullae. Asci ovoidei, octospori. Sporidia 2-4 locularia, hyalina. — Typus gen.: *Doth. litigiosa* (Desm.) v. H. = *Microthyrium litigosum* (Desm.) Sacc.

PARAPELTELLA Spegazz., Rel. myc. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 143-144 (Etym. a *para* proximum et *Peltella*). — A gen. *Micropeltella* Syd. (ad species ab initio rotunde ostiolato-perforatas reductum) differt thyriotheiciis astomis senectute tantum medio radiatim dehiscentibus.

1. **Parapeltella macrosperma** Spegazz., Rel. Mycol. trop. etc. in Bol. Ac. 4965
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 143. — Maculae nullae sed matrix tota conspicue infusata; subiculum plane nullum; thyriotheicia sparsa minuta 100-150 μ diam. atra, astoma sed per aetatem centro minute stellatim dehiscentia, glabra, coriacea, contextu indistincto, ambitu vix hyalino-marginata ac hyphis nonnullis subreticulatis appendiculata: asci obovati, apice rotundati crassissime tunicati, basi in pedicello brevi crassoque attenuati, aparaphysati, 6-8-spori, 50-60 \times 20-25; sporae elongato-subclavulatae utriusque rotundatae, leniter arcuato-inaequilateriales, transverse 9-11-septatae, ad septa non constrictae, primo hyalinae demum subchlorinae, 30-40 \times 6-7.

Hab. ad folia viva ? *Acanthocarpus* sp. (Liliaceae), in silvis prope Apiahy, Brasilia (J. PUIGGARI).

2. **Parapeltella mediocris** Spegazz., Fungi Costaric. nonn., in Bol. Ac. 4966
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 214, cum icon. — Maculae nullae; thyriotheicia laxissime gregaria v. sparsa, mediocria 200-300 μ atra glabra opaca astoma, sed centro minute stellatim dehiscentia, ambitu vix denticulato, non hyalino-marginata, contextu dense minuteque parenchymatico; asci obelavulati, obtusi brevissime crasseque pedicellati omnino aparaphysati, saepius te-

traspore, 60-65 \times 18; sporae mediocres lineari-subelavulatae tetramerae hyalinae, 30 \times 5-7.

Hab. ad folia *Myrtaceae* ignotae, prope S. José Costarica, America trop.

ACTINIOPSIS Starb. — Syll. XVI p. 543, XVII p. 871, XXII p. 530.

1. *Actiniopsis Rickii* Theiss., Broteria, Bot. v. XII, 1914, fasc. I, p. 26. — 4967

Stromata laxa gregaria nigra, cylindrico-globosa, 170-200 μ diam. fasciculis setarum 8-15 supra ornata. Asci ad basim peritheci fasciculati elongati, cylindracei, octospori, 80-90 \times 13-16. Paraphyses filiformes numerosae ascos superantes, tenerrime septatae. Sporae imbricate monostichae v. distichae, hyalinae, rectae vel curvulae, basi vel utrinque acutatae, 30-35 \times 4-5, transverse 5-7-septatae. Perithecia instructa sunt ostiolo irregulariter orbiculare margine dilacerato. Textura stromatis nigra, fere carbonacea; parietes peritheciales molliores, attamen tenaces, non carnosulae, hyphis tenerimis, laeticoloribus, dense stipatis et indistincte parallelibus, fasciculi hypharum marginales basi ca. 85 μ lati 180-250 μ longi cuneatim attenuati, albescentes, ad basim ascellarem obscuriores. Saepe singuli fasciculi non distinguuntur, sed in coronam continuum coaliti discum circumdant, peripherice tantum serrato-incisi; hyphae fasciculorum griseo-viridulae ca. 3 μ crassae, singulae singulis dense appressae. Asci breviter stipitati, cylindrici; supra paullo angustati, apice rotundati (interiore tantum sacco truncato). Iodi ope asci et paraphyses lutescunt.

Hab. epiphylla in foliis *Orchideae* epiphytae, Sao Leopoldo, Brasiliae merid. (RICK). — *Actiniopsis violaceo-atra* v. Höhn., huius speciei similis differt sporis multo longioribus.

Sect. 5. *Phaeophragmiae*

AMAZONIA Theiss., Ann. Mycol. 11., 1913, p. 409; Theissen et Sydow; l. c. 15., 1917, p. 421.

1. *Amazonia polypoda* Syd., Ann. Mycol. XV, 1917, p. 145. — Peri- 4968
theciis amphigenis in plagulas minutas 0,5-2 mm. diam.; dense dispositis, facile secedentibus, superficialibus, orbicularibus, 350-450 μ diam., radiatim ex hyphis rectis, fasciculis centro subopacis, 6-8 μ cr., septatis (articulis 15-20 μ long.) ad peripheriam plerumque clavato-dilatatis compositis, haud fimbriatis, centro pluristratosis, ad marginem unistratosis; mycelio ex hyphis radiantibus, lon-

giusculis, regularibus, rectis, fuscis, $8-9\ \mu$ cr.; laxe ramosis composito; hyphopodiis capitatis copiosissimis, longa serie alternantibus, subcylindraceis v. oblongo-ovoideis, clavato-stipitatis; semper integris, rotundatis, $15-20 \times 10-12$, cellula basali brevissima, saepe vix conspicua; hyphopodiis mucronatis multo rarioribus alternatis v. oppositis, superne subtenuatis, $16-22 \times 9-11$, ascis bisporis, $50-60 \times 20-25$; sporidiis oblongis, utrinque rotundatis ad septa constrictis, fusciculis, $35-42 \times 14-18$, loculis fere aequalibus v. extimis paullo minoribus.

Hab. in foliis *Straussiae Marinianae* (Rubiaceae), Oaln, Ins. Sandwicensium (H. L. LYON).— Affinis *Amazon. psychotricolae* (P. Henn.) Theiss.

PATOUILLARDINA Arnaud, C. R. Ac. d. Sc. Paris, t. 159, 1917, p. 890. — 4969

Mycelium externum stigmopodiis praeditum et perithecios externos generans; paraphyses nullae; asci erecti, paralleli, ellipsoidei v. ovoidei; sporae brunneae pluries transverse septatae. — Huc du-cenda est *Meliola clavispora* Pat.

Sect. 6. Phaeodictyae

YATESULA Syd., Ann. Mycol. XV, 1917, p. 237 (Etym. a cl. H. S.

YATES fungi detectore).— Membrae superficiales pseudoparenchymatice contextae, atro-brunneae, ad marginem radiantes, sed mycelio proprio libero fere destitutae; hymenia plura, ubique evoluta, polyascigera; asci clavati, 4-8-spori paraphysati; sporae muriformes, roseolae.

1. **Yatesula Calami** Syd., l. c. p. 237. — Membrae amphigenae spar- 4970

sae vel inde binae trinae aggregatae et confluentes, rotundatae, 1-2 mm. diam., superficiales, atro-brunneae ad marginem radiantes subpellucidae ex hyphis $2,5-3\ \mu$ crassis contextae, centro plerumque opacae subatrae, hypothecio fibroso, roseolo; hymenia plura in quaque membrana evoluta, ubique dispersa, polyascigera; asci clavati vel cylindraceo-clavati, breviter tenuiterque stipitati, superne rotundati, 4-8-spori, indistincte paraphysati, $35-55 \times 9-12$; sporae plerumque distichae, oblongae vel clavulatae, 3-4 septatae, ad septum medium saepe leniter constrictae, utrinque rotundatae vel ad basim leniter attenuatae, $10-13 \times 2,5-3,5$, pallide roseolae, praecipue in ascis, cellula una alterave (praecipue apicali) subinde oblique vel horizontaliter septatae.

Hab. in foliis Calami sp. (Palmae), Rizal, Luzon, Ins. Philipp. (H. S. YATES).

Subfam. 4. Trichothyriaceæ

Dispositio systematica Generum secundum v. Theissen l. c.

Trichothyriaceæ Theiss., Beih. Bot. Centralbl. Abt. II, 32., 1914

H. 1. — Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 484; v. Höhnelt, Ber. d. Deutsch. Bot. Ges. 35., 1917, pp. 411-416, 2 fig.

I. Thallo copiose evoluto

- a) Sporidia hyalodidyma
- b) Sporidia phaeodidyma
- c) Sporidia hyalophragma

TRICHTHYRIUM Speg.
TRICHTHYRIELLA Theiss.
TRICHTHYRIOPSIS Theiss.

II. Thallo nullo

- a) Sporidia hyalodidyma
- b) Sporidia hyalophragma

LORANTHOMYCES v. H.
ACTINOPHELIS v. H.

TRICHTHYRIUM Speg. — Syll. IX p. 1062, XXII p. 521 — Syn. *Trichopeltopsis* v. Höhn., Fragm. z. Mykol. VII, 1909, n. 325.

1. *Trichothyrium orbiculare* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 492, fig. 2. — Hypophyllum, in mycelio *Meliolae* parasiticum, mycelio hyphas *Meliolae* omnino amplexente et pelliculam tenuem fere continuam efformante, ex hyphis obscure olivaceo-fuscis, ramosis et anastomosantibus, vix vel parce septatis, 2-3 μ latis (permultis tenuioribus et pallidioribus subhyalinis interjectis) composito; hyphopodiis nullis; peritheciis radiatim oriundis, dense stipatis, ambitu omnino circularibus, 125-150 μ diam., atris, dimidiato-scutatis, centro ostiolo rotundo 15-25 μ lato distincto praeditis, contextu obscure fusco, saepe subopaco, centro dilutiore, amoene radiatim ex hyphis 2,5-3 μ latis fuscis composito; ascis ovato-oblongis vel oblongis, sessilibus, apice rotundatis, non vel leniter incrassatis, octosporis, apophysatis, 35-50 \times 15-18; sporidiis distichis, subinde tristichis, ovato-oblongis, medio 1-septatis, non vel leniter constrictis, hyalinis, 14-17 \times 3-4,5, cellula superiore latiore.

Hab. in mycelio Meliolae ad folia Heliciae sp. (Proteaceae), Luzon, Subprov. Ifugao, Mt. Polis, ins. Philipp. (Mc. GREGOR). — Specimina immatura videntur; an sporidia demum pluriseptata?

2. *Trichothyrium iquitosense* F. Theissen, Verh. zool.-bot. Ges. 69., 1919, 4972 p. 22. — Epiphyllum, ad mycelium Chaetosphaeriae et Meliolae adnatum. Mycelium proprium parce evolutum ex hyphis pallidis exhyphopodiatis, reticulato-ramosis, 3 μ cr. efformatum. Peritheciis confertis, arescendo discoideo-applanatis, centro papillatis nigris opacis, levibus, 150-170 μ latis, non dimidiatis, contextu radiato-efformatis; ascis clavatis v. subcylindratis, 28-38 \times 9-10, parce paraphysatis, breviter pedicellatis, supra rotundatis, octosporis; sporidiis distichis, hyalinis, 7-8 \times 2,5, uniseptato-constrictulis, loculo super. subrotundato, inferiori cylindrato.

Hab. in foliis *Palmæ* cujusdam, Iquitos Rio Amazonas, Brasilia.

- TRICOTHYRIELLA** Theiss., Beih. Bot. Centralbl. 32., 1914, p. 4. — 4973
Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 488. — Thallo filamentoso irregulariter floccoso. Paraphyses nullae. Sporidia bilocularia brunnea. Caeterum ut in *Trichothyrio*. — Typ. gen. *Trich. quercigena* (Berk.) Th.

- TRICOTHYRIOPSIS** Theiss., Beih. Bot. Centralbl. 32., 1914, p. 4. — 4974
Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 488. — A *Trichothyrio* differt sporidiis hyalophragmiis. — Typ. gen. *Tr. densa* (Rac.) Th. l. c., *Tr. sexspora* (Starb.) Th. et *Tr. juruana* Theiss.

- LORANTHOMYCES** v. Höhn., Fragm. z. Myk. VII, 1914, n. 310, Ber. 4975 d. Deutsch. Bot. Ges. 1917, p. 414. — Theiss. et Sydow, Ann. Myc. XV, 1917, p. 488. — Thallo nullo v. evanido. Perithecia in fungis stromaticis nidulantia. Caeterum ut in *Trichothyrio*. Paraphyses nullae. — Typ. gen. *Lor. sordidulus* (Lev.) v. Höhn. l. c., *L. epimyces* (B. R. S.) v. Höhn.

- MYCOLANGLOISIA** G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 157 (Etym. a bot. A. B. LANGLOIS). — A Gen. *Trichothyrium* Sp. 1889, stromatibus circa ostiolum setulis erectis ornatis tantum differt.

1. *Mycolangloisia echinata* G. Arnaud, l. c., tab. XXVII. — Stromatibus 4976 depresso conoideis margine non fimbriatis 150-170 μ diam., circa ostiolum setulis 8-12, brevibus, 40 μ , brunneis acutis ornatis; sporidiis fusoides bilocularibus hyalis (an semper?), 25 \times 5, medio constrictulis; mycelio externo incoloro, ramoso-intricato, septulato.

Hab. parasiticum in mycelio? Parodiopsisidie sp. in foliis *Rubiacae* ejusdam, Brasilia, America austr. (E. ULE).

Subf. 5. Trichopelteae

Caracteres et dispositio system. Gen. sec. v. Theissen.

Trichopeltaceae Theissen, Centribl. Bakt. II Abt. 39. (1913) p. 629

Theissen et Sydow, Ann. Mycol. 15., 1917, p. 425.

Thallus vegetativus superficialis, membranosus, radiato prosenchymaticus. Loculi ascigeri in ipso thallo pycnotice transformato evolvuntur, peltati, ostiolo demum irregulari aperti.

A. Thallus linearis vel vittaeformis, ramosus. TRICHOPELTINEAE Theiss.

I. Sporidia 2-locularia

1. Sporidia hyalina

TRICHOPELTINA Theiss.

2. Sporidia colorata

TRICHOPELTELLEA v. Höhn.

II. Sporidia 3-locularia, hyalina

TRICHOPELTIS Speg.

III. Sporidia 4-plurilocularia hyalina

TRICHOPELTULA Theiss.

B. Thallus rotundatus, confluent

BREFELDIINEAE Theiss.

I. Sporidia 2-locularia, hyalina

BREFELDIELLA Speg.

II. Sporidia 2-locularia, colorata

PYCNOCARPON Theiss.

TRICHOPELTINA Theiss., Centribl. Bakt. II Abt., 39. (1913) p. 630; 4977

Theiss. et Sydow, l. c. p. 426. — Thallus superficialis, vittaeformis, ramificatus, radiato-prosenchymaticus. Pycnothecia in thallo formata, centro demum irregulariter pertuso (ostiolo non typico). Asci paraphysati. Sporae hyalodidymae.

T. Labecula (Mont.) Theiss. — *Asterina Labecula* Mont. — Sacc. Syll. I, p. 44.

T. chilensis (Speg.) Theiss. — *Trichothyrium ch.* Speg. — Syll. XXII p. 521.

TRICHOPELTELLEA v. Höhn. — Theiss., loc. cit. p. 632. — Theiss. et Sydow, l. c. p. 426. — Est *Trichopeltina* sporidiis phaeodidymis.

T. montana (Bac.) v. Höhn. — *Trichopeltis montana* Racib. — Sacc., Syll. XXII p. 524 [sub *Seynesia*].

TRICHOPELTULA Theiss., Centribl. Bakt. II Abt. 39. (1913) p. 636. — Theiss. et Sydow, l. c. p. 427. — Ut *Trichopeltina* sed sporidiis 4-locularibus.

1. *Trichopezizula Hedyccariae* Theiss., l. cit., tab. I fig. 3. — *Epiphylla*. 4979

Thallo vittaeformi, repente, ramoso, vittis brunneo-atris 50-90 μ latis, radiato-prosenchymaticis, cellulis anguste rectangularibus; pycnotheciis in thallo formatis, aliis conidioferis 50 μ , aliis ascophoris 80-100 μ diam., applanato-hemisphaericis demum apice perforatis; conidiis bacillaribus, hyalinis. continuis, 7-8 \times 1-1,5; ascis aparaphysatis, octosporis, obelavatis, supra late rotundatis, infra in nodum brevissimum coaretatis, 25-30 \times 16-18; sporidiis tristichis, hyalinis, oblongis, subcurvatis, 13-15 \times 2,5-3, triseptatis, cellulis mediis subcubicis, extremis subconice attenuatis.

Hab. in foliis *Hedyccariae dentatae* (Monimiaceae), in Nova Zelandia (COLENSO n. 163 in Herb. Kew, sub *Asterina reptans* B. et C.).

PYCNOCARPON Theiss., Die Gattung *Asterina* (1912) p. 31; Centrbl.

Bakt. II Abt. 39. (1913) p. 639. — Theiss. et Sydow, l. c. p. 427. —

Thallus superficialis consistens ex membranis simplicibus (strato cellularum unico) prosenchymatico-radiantibus, orbicularibus, confluentibus, in centro stratoso et elevato pycnothecia formantibus. Pycnothecia in thallo formata (cellulis ipsius crebrius divisae et incrassatae) rima longitudinali (ostiole non typico) dehiscencia. Asci aparaphysati. Sporidia phaeodidyma. Receptacula pycnotheciis similibus producant pycnoconidia atra continua.

1. *Pycnocarpon magnificum* (Syd. et Butl.) Theiss. l. c., *Asterina ma-* 4980

gnifica Syd. et Butl., Ann. Mycol. IX, 1911, p. 391. — Peritheciis hypophyllis, plus minus dense aggregatis, hinc inde crustas atras formantibus atro-brunneis, planis, ambitu rotundatis v. subinde lobatis, margine elevato, 500-800 μ diam., rima singula v. pluribus elongatis dehiscencia, in juventute ut plurimum poro minuto rotundo apertis, mycelio parce evoluto ex hyphis 8-9 μ cr. composito, contextu radiatim celluloso; pycnidiiis eadem forma et structura ac peritheciis; pycnidiosporis ovato-oblongis v. oblongis, continuis, brunneis, 35-50 \times 15-18; ascis obovatis v. subglobosis, 52-92 \times 50-75, 2-8-sporis; sporidiis ellipsoideis, utrinque rotundatis medio 1-septatis, valde constrictis, levibus, brunneis v. fumoso-brunneis, 33-40 \times 20-25.

Hab. in foliis *Terminaliae* sp. (Combretaceae), Moulmein, Burma, Indiae or. (E. J. BUTLER).

2. *Pycnocarpon fimbriatum* H. et P. Sydow, Ann. Mycol. XII, 1914, 4981

p. 563. — Membranis amphigenis, primitus plus minus orbiculari-

bus, dein pluribus confluentibus et tunc pelliculas irregulares vel suborbiculares 1-2 mm. latas formantibus, superficialibus, atris, sub microscopio opace vel fere opace brunneis, ex hyphis prosenchymatico-radiantibus 5-7 μ crassis creberrime septatis (articulis 6-8 μ longis) strato singulo compositis, ambitu hyphis similibus sed remotius septatis plus minus longe fimbriatis, hyphis liberis membranas obtegentibus nullis; pycnotheciis orbicularibus vel saepius ellipticis, 80-150 μ longis, convexis opacis; sporidiis nos visis.

Hab. in foliis *Hopeae plagatae* (Dipterocarpaceae), Angat prov. Bulacan, Luzon, Ins. Philippin. (M. RAMOS).

3. **Pycnocarpon Parashoreae** Syd., Ann. Mycol. XV, 1917, p. 235. — 4982

Thallus superficialis membranas planas confluentes 1-4 mm. diam., atras prosenchymatico-radiantes formans; membranae e strato cellularum unico hypharum fuscarum 2,5-3 μ crassarum septatarum (articulis 6-8 μ longis) compositae ad ambitum hyphis toruloso-flexuosis flavo-brunneis 2,5-3,5 μ crassis fimbriatae; hyphae liberae supra membranas repentes parum evolutae, 3-4 μ crassae; pycnothecia numerosa, ex hyphis obscurioribus crassioribus 3,5-4,5 μ crassis et crebrius septatis (articulis 3,5-5 μ longis) composita; asci ovato-globosi, paraphysati, superne incrassati, 48-60 \times 38-42, octospori; sporae ellipsoideo-oblongae, utrinque rotundatae, medio septatae et constrictae, ex hyalino fuscidulae, leves 25-27 \times 10-12; receptacula conidiigera pycnotheciis similia, poro rotundo ca. 20 μ lato aperta, pycnoconidia oblonga vel anguste ellipsoidea, utrinque rotundata, hyalina, 22-25 \times 10, episporio crasso, ad apicem hypharum tenuium hyalinarum brevium ortae.

Hab. in foliis *Parashoreae plicatae* (Dipterocarpaceae), Rizal, Luzon, Ins. Philipp. (H. S. YATES).

4. **Pycnocarpon nodulosum** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4983

562. — Membranis epiphyllis, primitus plus minus orbicularibus, dein pluribus confluentibus et tunc valde irregularibus, singulis 200-500 μ diam. majoribus usque 1-2 mm. diam., superficialibus planis, atris, sub microscopio pellucide brunneis, ex hyphis prosenchymatico-radiantibus 3-5 μ crassis creberrime septatis (articulis ubique 5-7 μ longis) strato singulo compositis; hyphis liberis membranas obtegentibus rectis, laxe rectangulariter v. fere rectangulariter et opposite ramosis, 3-5 μ crassis, septatis (articulis 14-25 μ long) obscure castaneo-brunneis, noduliferis; nodulis hypharum sat numerosis, unilateralibus, hemisphaericis, 6-8 μ crassis; pycnotheciis plus minus numerosis in quaque membrana, minutis, orbi-

cularibus usque ellipticis, 100-140 μ diam., convexis, opacis v. fere opacis; sporidiis phaeodidymis (ut videtur).

Hab. in foliis *Parinari corymbosi* (Rosaceae), Antipolo prov. Rizal, Ins. Philippin. (M. RAMOS).— Ob hyphas noduliferas a *Pycn. magnifico* mox dignoscitur.

Subf. 6. Hemisphaeriaceæ

Caracteres et dispositio systematica secundum v. Theissen

Hemisphaeriaceæ Theiss., Ann. Mycol. II., 1913, p. 469; Mycol. Centralbl. 1913, p. 285. — Theissen et Sydow, Ann. Mycol. 15, 1917, p. 427.

Mycelium plerumque nullum, v. superficiale ramoso-reticulatum coloratum exhyphopodiatum. Ascomata superficialia scutata, contextu scutelli effuso-parenchymatico v. labyrinthiformi-plectenchymatico; matura rotundato-aperta v. lacerata:

- A. Scutellum laxe reticulatum, cyaneo-virescens, margine radianti; mycelium proprium nullum; hymenium simplex polyascom

DICTYOPELTINEAE Theiss.

a) Sporidia continua hyalina

DICTYOTHYRINA Th.

b) Sporidia hyalodidyma

1.) Scutellum poro centrali praeditum

DICTYOTHYRIUM Th.

2.) Scutellum poro destitutum

DICTYOPELTIS Th.

c) Sporidia 3-locularia hyalina

DICTYOTHYRIELLA Rhem.

1.) Paraphyses praesentes

MICROPELTIS Mont.

2.) Paraphyses nullae

MICROPELTELLEA Syd.

d) Sporidia elongato-filiformia, septata

SCOLECOPELTIS Speg.

(= Scolecopelopsis v. H.)

- B. Scutellum pseudoparenchymaticum brunneum, margine radianti; mycelium proprium nullum; hymenium simplex v. compositum, monascom, v. polyascom

THRAUSMATOPELTINEAE Theiss.

a) Hymenium singulum

HAPLOPELTIS Th.

1. Sporidia continua hyalina

2. Sporidia hyalodidyma

α) Ascoma rotundatum, poro circulari nullo

* Paraphyses praesentes

CLYPEKOLUM Speg.

** Paraphyses nullae

MICROTHYRIELLA v. H.

β) Ascoma lineare, longitudinaliter apertum

SCHIZOTHYRIUM Desm.

(= Epipeltis Th.)

3. Sporidia hyalina plurilocularia PHRAGMOTHYRIELLA V. H.
- b) Hymenia plurima, contextu hypotheciali fibroso
divisa
1. Hymenium singulum polyasum; sporidia
hyalodidyma POLYCLYPEOLUM Th.
2. Hymenium singulum monasum
- *) Sporidia hyalodidyma EREMOTHECA Th. et Syd.
- **) Sporidia hyalophragmia EREMOTHECELLA Syd.
- O. Scutellum labyrinthiformi-plechten-
chymaticum, centro apertum v.
non; mycelium ramoso-reticulatum,
exnymphodiatum PLOCHMOPELTINEAE Th.
- a) Scutellum clausum; paraphyses nullae; hyme-
nium monasum; sporidia hyalodidyma PLOCHMOPELTIS Th.
- b) Scutellum poro centrali praeditum; hymenium
polyasum; sporidia hyalodidyma
1. Membrana setulis destituta
- *) Paraphyses praesentes STOMIOPELTIS Th.
- **) Paraphyses nullae STOMIOPELTELLE Th.
2. Membrana setulis praedita CHAETOPELTOPSIS Th.

Trib. 1. Dictyopeltinae Theiss.

Sect. 1. Hyalosporae

DICTYOTHYRINA Theiss., Ann. Mycol. XI, 1913, p. 468. — Theiss. et 4984
Syd. in l. c., XV, 1917, p. 429. — Membrana distincte reticulata,
viridi-cyanea, depressa, centro circulariter aperta. Hymenium sim-
plex polyasum Hypothecium tenue, hyalinum, fibrosum. Paraphy-
ses praesentes. Epithecium nullum. Sporidia hyalina unilocularia. —
Typ. gen. *Dict. fecunda* (Sacc. ut *Myiocopron*) Th., *D. atrocyanea*
(Starb.) Th.

Sect. 2. Hyalodidymae

DICTYOTHYRIUM Theiss., Oesterr. bot. Ztschr. 1912, p. 277. — Theiss.
et Syd., Ann. Mycol. XV, 1917, p. 429. — Est *Dictyothyria* hyalo-
didyma.

1. *Dictyothyrium giganteum* Syd., Philipp. Journ. of Bot. IX, 1914, n. 2, 4985
p. 178 — Peritheciis plerumque hypophyllis, sparsis, sine macu-
lis, omnino superficialibus, sine mycelio, atris, opacis, rotundatis,
500 700 μ diam., carbonaceis, planis, centrum versus lenissime ele-

vatis, poro rotundato distincto 25-35 μ lato instructis; contextu centrali omnino opaco obscure atro-coeruleo, peripherico laxiore dilutius amoene coeruleo usque hyalino ex hyphis tenuissimis 1-1,5 μ latis dense ramosis et maeandrice conjunctis composito; ascis subsaccatis, ad basim latis apicem versus plerumque angustioribus, sessilibus, crasse tunicatis (praecipue ad apicem), 90-125 \times 35-45, 2-4-sporis, copiosissime filiformiter paraphysatis; sporidiis oblongo-cylindraceis, utrinque late rotundatis, ad septum constrictis, hyalinis intus densissime granulosis 65-100 \times 16-18, loculis sive aequalibus, sive quoad longitudinem inaequalibus.

Hab. in foliis *Memecylonis lanceolati* (Melastomataceae), socia *Morenoella Memecyli* Syd., Palawan, Taytay, Ins. Philipp. (MERRILL).

2. *Dictyothyrium leucopterum* Syd., Ann. Mycol. XIV, 1916, p. 93. — 4986

Peritheciis epiphyllis, sparsis, omnino superficialibus, sine mycelio, rotundatis, subcarbonaceis, planis, poro rotundo distincto 35-40 μ lato pertusis, 500-800 μ diam., ad marginem praeterea zona latissima hyalina 300-400 μ lata circumdatis; contextu centrali omnino opaco obscure atro-coeruleo, peripherico laxiore coeruleo ad marginem latissimum hyalino, ex hyphis tenuissimis 1-1,5 μ latis dense ramosis et maeandrice conjunctis composito; ascis obclavatis, apice rotundatis vel leniter attenuatis, copiose paraphysatis, 125-170 \times 18-35, 2-3-4-6-sporis, raro 8-sporis; sporidiis plerumque distichis, variabilibus, primo minoribus 40-60 μ tantum longis, in maturitate usque 140 μ longis, 14-18 μ latis, hyalinis, 1-septatis, ad septum constrictis, plerumque inaequilateris, loculis plerumque valde inaequalibus, inferiore multo longiore, subinde etiam aequalibus.

Hab. in foliis *Coccoloba* (Polygonaceae), Seringal, S. Francisco, Rio Acre, Brasilia. (E. ULB). — Huc pertinet etiam *D. chalybaeum* (Rehm) Th., *D. subcyaneum* (E. et M.) Th., *D. giganteum* Syd.

DICTYOPELTIS Theiss., Ann. Mycol. XI, 1913, p. 468. — Theiss. et 4987

Syd., l. c., XV, 1917, p. 430. — Membrana astoma maturitate usque ad marginem disrupta. Paraphyses nullae. Caeterum ut *Dictyothyrium*. Typ. gen. *D. vulgaris* (Rac. ut Clypeolum) Theiss., *D. colubrina* (E. et K.) Theiss.

Sect. 5. Hyalophragmiae

MICROPELTIS Mont. — Syll. II p. 669, IX p. 1069, XI p. 381, XIV, p. 690, XVI p. 642, XVII p. 868, XXII p. 525.

1. *Micropeltis Semecarpi* Syd., Enum. Philipp. Fungi II, in Philipp. 4988

Journ. of Sci. VIII (1913) p. 488. — Peritheciis epiphyllis, sine maculis, in greges 1-4 cm. latos aequaliter densiusculeque dispositis, dimidiatis, centro elevatis, minute papillulatis et pertusis, discoideis, 200-240 μ diam., atris glabris, contextu ex hyphis tenuibus, olivaceo-brunneis, flexuosis vel etiam ramosis, non vel vix septatis, 1-1,5 μ cr. subradiatim composito, margine plus minusve lato, albo-membranaceo, tenuissimo cinctis; ascis cylindraceo-clavatis, apice obtusis, 45-55 \times 8-11, octosporis, paraphysibus copiosis simplicibus filiformibus 50-60 \times 0,75 obvallatis; sporidiis oblique monostichis vel distichis, fusoideis, primo 1-septatis dein 2-septatis, constrictis, hyalinis, utrinque obtusis, 15-18 \times 3-5.

Hab. in foliis *Semecarpi cuneiformis* (Anacardiaceae), Luzon, Manila, ins. Philipp. (MERRILL).

2. *Micropeltis borneensis* P. et H. Syd., Ann. Mycol. X, 1912, p. 81. — 4989

Peritheciis epiphyllis, sine maculis, sparsis, sessilibus, dimidiato-scutatis, membranaceis, mycelio carentibus, atris, 300-400 μ diam., centro papilla elevata praeditis, tandem e centro marginem versus dehiscentibus, contextu tenuissimo atro-coeruleo ad ambitum ex hyphis tenuibus dense intertextis anastomosantibus composito; ascis clavatis v. clavato fusoideis, 45-60 \times 12-17, octosporis, paraphysatis; sporidiis distichis v. conglobatis, fusiformibus, 5-septatis, ad septa constrictis, facile in loculos secedentibus, utrinque obtusis hyalinis, 20-25 \times 4-5.

Hab. in foliis vivis *Anonaceae*, Hayoep, Borneo sud-or. (H. WINKLER); in foliis *Goniothalami Elmeri* (Anonaceae), Mt. Maquiling, ins. Philipp. — Fm. sporidiis saepe 7-cellularibus in foliis *Eugeniae* sp. (Myrtaceae), Mt. Maquiling. — Fm. sporidiis saepius 5-cellularibus in foliis *Fici caudatifoliae* (Moraceae), Los Baños, Ins. Philipp. (C. F. BAKER).

3. *Micropeltis macromera* Syd., Ann. Mycol. XIV, 1916, p. 89. — 4990

Peritheciis epiphyllis, sparsis, orbicularibus, 600-800 μ diam., dimidiatis, centro elevatis, ostiolo ca. 25-30 μ lato rotundo pertusis, atris, glabris, contextu ex hyphis tenuibus, obscure atro-coeruleis flexuosis 1-1,5 μ latis subradiatim composito, margine angusto albo-membranaceo tenuissimo cinctis, ascis fusoideis, octosporis, obtusis, 120-150 \times 23-35, paraphysibus numerosis hyalinis, 1 μ crassis; sporidiis di-tristichis, fusoideis, semper biseptatis, constrictis, hyalinis, subrectis, 38-62 \times 9-11, utrinque attenuatis, cellulis duabus extimis plerumque cuneatis et longioribus.

Hab. in foliis *Philodendri* (Araceae), Seringal S. Francisco Rio Acre, Brasilia (E. ULE).

4. *Micropeltis epixyla* Sacc., Notae Mycol. XXIV p. 29 (Bull. Orto bot. 4991 Nap. 1918). — Peritheciis in ligno dealbato subsparsis, superficialibus, dimidiato-scutiformibus, subcircularibus, 90-150 μ diam., tenui-membranaceis, poro 25 μ lato pertusis, nigricantibus, contextu radiatim prosenchymatico, margine leviter denticulato; ascis fasciculatis, tereti-clavatis, 40-65 \times 9, apice obtuso crassiuscule tunicatis, filiformi-paraphysatis, oligosporis (?); sporidiis distichis, fusoides, utrinque obtusulis, saepe curvulis, 18-20 \times 3-4, tetrablastis (an demum 3-septatis?) non constrictis, hyalinis.

Hab. in ligno emortuo *Coryli Avellanae* (Betulaceae), Avellino, Ital. merid. — Specimina non omnino matura, sed species distincta videtur.

5. *Micropeltis Evonymi* Syd., Ann. Mycol. XV, 1917, p. 229. — Thyrio- 499 thecia amphigena, plerumque hypophylla, sparsa, haud maculicola, orbicularia, 600-800 μ diam., opace atro-coerulee et reticulatim contexta, ad ambitum hyalino-marginata, poro rotundo 30-40 μ lato pertusa; asci sessiles, fusoides vel ventricosi, 80-100 \times 20-30, octospori paraphysati; sporae tereti-clavulatae, typice 3-septatae, vix vel leniter constrictae, hyalinae, superne late rotundatae, basin versus obtuse attenuatae, rectae vel curvatae, 25-30 \times 7.5-9.

Hab. in foliis *Evonymi japonicae* (Celastraceae), Mt. Maquiling prov. Laguna, Ins. Philipp. (O. F. BAKER).

6. *Micropeltis corruscans* Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4993 of Sci. VIII (1913) p. 255. — Peritheciis in foliorum vivorum pagina inferiore decolorata crispataque gregarie sessilibus, dimidiato-scutatis, poro pertusis, centrifuge fusce contextis, glabris, ad marginem hyphis nonnullis septatis fuscidulis usque ad 25 μ longis obsessis, 100 μ diam.; ascis clavatis, sessilibus, octosporis, paraphysatis, 30 \times 10; sporidiis oblongis, obtusis, rectis, medio septatis non constrictis, utrinque biguttulatis, dein 4-locularibus, hyalinis, 9-12 \times 3-3.5.

Hab. in foliis *Synedrellae nodiflorae* (Compositae), Luzon, Prov. Laguna, Los Baños ins. Philipp. (O. F. BAKER).

7. ? *Micropeltis pitya* Sacc., Ann. Mycol. XIII, n. 2 (1915) p. 117. — Pe- 499 ritheciis sparsis hypophyllis, superficialibus, secedentibus, nigris, dimidiato-scutatis, in sicco tumidatis convexo-hemisphaericis, 180-200 μ diam. contextu tenuissime celluloso, vix radiante, margine breviter fimbriato, ad centrum sensim extenuato, non vere ostio-

lato; ascis ellipsoidis, basi sessilibus sed minus obtusis, $25 \times 14-15$, octosporis; sporidiis subtristichis, initio 1-septatis, hyalinis, maturis breviter fusoides, 3-septatis, non constrictis, dilutissime viridulis, $14-15 \times 4$.

Hab. in foliis languidis *Abietis balsameae* (Coniferae), Tupper Lake N. Y. (HOUSE). — Species ob contextum perithecii vix radiantem dubiae sedis et alterius inquirenda in exemplaribus magis evolutis.

8. *Micropeltis Acalyphae* Syd., Ann. Mycol. XV, 1917, p. 229. — Thy- 4995
riothechia epiphylla, sparsa, sine maculis, vix visibilia, orbicularia, $250-350 \mu$ diam., reticulatim et intense caerulee contexta, praeterea margine hyalino usque 40μ lato cincta, poro $15-20 \mu$ lato pertusa, asci ventricosi vel subfusoides, sessiles, 4-6-8-spori, $38-42 \times 12-16$; paraphyses tenues, filiformes, modice copiosae; sporae clavatae, superne late rotundatae, basim versus attenuatae, plerumque curvulae, hyalinae, 5-septatae, non vel vix constrictae, $20-25 \times 4-5$.

Hab. in foliis *Acalyphae stipulaceae* (Euphorbiaceae), Los Baños, Ins. Philipp. (O. F. BAKER).

9. *Micropeltis aequalis* Syd. in Leaflets of Philipp. Bot. V (1912) p. 4996
1543. — Peritheciis amphigenis, praecipue epiphyllis, plerumque per totam folii superficiem aequaliter dispersis, superficialibus, dimidiato-scutatis, planis, $300-350 \mu$ diam., atris, centro obsolete minutissimeque pertusis, ad marginem latiuscule albo-membranaceis, subiculo nullo, contextu fusco-coeruleo minutissime celluloso; ascis fusoides vel clavato-fusoides, subsessilibus, apice obtusis, $45-55 \times 8-15$, aparaphysatis, octosporis; sporidiis 2-3-stichis, tereti clavulatis, apice rotundatis et incrassatis, 3-septatis, leniter constrictis, hyalinis vel subhyalinis, $16-19 \times 3,5-4$.

Hab. in foliis *Actephilae dispersae* (Euphorbiaceae), Brooks Point, Palawan, ins. Philipp. — *M. leucopterae* Penz. et Sacc. affinis; differt sporidiis latioribus.

10. *Micropeltis samarensis* Syd., Ann. Mycol. XV, 1917, p. 230. — Thy- 4997
riothechia epiphylla, sparsa, orbicularia, scutata, $600-700 \mu$ diam., poro centrali rotundo $30-35 \mu$ lato pertusa, subatra, opaca marginem versus griseo-coeruleum pellucida, vix vel non albo marginata, contextu ut in reliquis generis speciebus; asci cylindraneo-clavati, ad apicem obtusi, breviter stipitati, $100-130 \times 17-20$, 4-8-spori, copiose paraphysati; sporae di-tristichae, fere vermiculares, rectae vel inaequilaterales, 6-7-septatae, ad omnia septa leniter constrictae, hyalinae $48-60 \times 6-8$, cellula tertia superiore longiore et

crassiore (usque 10 μ crassa).

Hab. in foliis *Cyclostemonis* sp. (Euphorbiaceae), Catubig River, Samar, Ins. Philipp. (M. RAMOS). — *Microp. corynesporae* affinis.

11. *Micropeltis applanata*. — Syll. II, p. 669. — Var. *Galeariae* Sacc., 4998

Notae Mycol. XXIV, p. 12 (Bull. Orto bot. Napoli, 1918). — A typo distinguitur sporidiis plerumque 5-7-septatis, fusoides-clavulatis, 24-30 \times 4,5-5,5, ascis 6-8-sporis, filiformi-paraphysatis, 55-65 \times 14-18, obclavatis; peritheciis 3-4 mm. lat., ostiolo eroso 100 μ diam.; contextu dense obscure celluloso, atro-fuligineo, non radiato.

Hab. in pag. imprimis super. foliorum adhuc viventium *Galeariae* affinis (Euphorbiaceae), Changi, Singapore (BAKER). — Plures species affines: *M. Leoniae*, *M. Hirtellae*, *M. schmidtiana* etc.

12. *Micropeltis Rheediae* Rehm, Ann. Mycol. IX, 1911, p. 368. — Peritheciis epiphyllis in maculis orbicularibus 0,5-2 cm: diam. fulvo-griseis, centrifuge pseudoparenchymatice flavidule contextis, gregariis, dimidiatis, orbicularibus, convexulis, poro pertusis, atris, glabris, parenchymatice nigro-coerulee contextis, ad marginem non radiantibus, c. 150 μ diam.; ascis fusiformibus, 40 \times 12, octosporis; sporis fusoides, rectis, transverse 5-septatis, hyalinis, 2-3-stichis 20 \times 3; paraphysibus filiformibus, apice subcurvatis 1 μ . 4999

Hab. ad folia *Rheediae* (Guttiferae), prope Para, Brasiliae (C. F. BAKER). — Perithecia minutissima punctiformia; similis species *Micr. Xylopiæ* Henn. quoad sporas. Plerumque in peritheciis modo sporulae hyalinae, cylindraceae, 3 \times 1,5.

13. *Micropeltis leptosphaerioides* Speg., Mycet. Argent. VI, Anal. Mus. 5000

Nac. Buenos Aires XXIII (1912) p. 83. — Peritheciis saepius epiphyllis, hinc inde laxe gregariis, atris, glabris, dimidiato-scutatis. 250-400 μ diam., membranaceis, stellatim dehiscens, ambitu minute fimbriatis, contextu denso, tenuiter radiante, olivaceo, centro subopaco ambitu pellucido; ascis cylindraceo-obclavatis, breviter crasseque pedicellatis, 1-2-aparaphysatis, 90-100 \times 18-22; sporidiis subtristichis, e cylindraceo subclavatis, leniter curvulis, primo grosse 9-guttulatis dein 7-9 septatis, ad septa non vel lenissime constrictis, loculo quarto supero, *Leptosphaeria* more, caeteris conspicue majore, hyalinis, 30-40 \times 8-9.

Hab. ad folia viva *Ocoteae diospyrifoliae* (Lauraceae), in silvis prope Calilegua, Jujuy, Argentina.

14. *Micropeltis trimera* Sacc., Notae Mycol. XXIV p. 13 (Bull. Orto 5001

bot. Napoli (1918). — Peritheciis remote sparsis, epiphyllis, dimi-

diatis, depresso-hemisphaericis, subcircularibus, superficialibus, 560-580 μ diam., poro centrali 18 μ diam. pertusis, nigris, contextu prosenchymatico, tortuoso subradianti, atro-fuligineo, in marginem pallidiorem latiusculum erosum extenuato; ascis clavato-cylindraceis. apice rotundatis, breviter stipitatis, filiformi-paraphysatis, 100-115 \times 16, saepe curvulis, octosporis; sporidiis distichis, fusiformibus, utrinque acutulis, saepius curvulis, 35 \times 8, subhyalinis, triangularibus, non constrictis.

Hab. in foliis emortuis *Gustaviae insignis* cultae (Lecythidaceae), Singapore (BAKER). — Affinis *M. mucosae* sed sporidiis fusiformibus, subhyalinis, ascis angustioribus etc. differt.

15. *Micropeltis similis* Syd., Ann. Mycol. XV, 1917, p. 230. — Thyriothecia in hypophyllo haud decolorato late dispersa, dimidiata, orbicularia, 500-700 μ diam., contextu reticulato opaco marginem versus sordide coerulescente praeterea zonula angusta hyalina mox evanida cincta, poro 20-30 μ lato aperta; asci fusiformes vel saccati aut ventricosi, sessiles, 80-90 \times 20-25, octospori; paraphyses paucae, tenuiter filiformes; sporae distichae, clavatae, 5-septatae, non constrictae, 25-28 \times 7-8, hyalinae, superne late rotundatae, basim versus attenuatae, cellulis duabus superioribus aequalibus et parum majoribus. 5002

Hab. in foliis *Bauhiniae Cumingianae* (Leguminosae), Los Baños, Ins. Philipp. (C. F. BAKER).

16. *Micropeltis consimilis* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 394. — Peritheciis in utraque foliorum pagina immutata sparsis, sessilibus, ambitu circularibus, dimidiato-scutatis, poro pertusis, glabris, atro-violaceis, arcte reticulato contextis, haud radiatis, 200 μ diam.; ascis elongato-ovoideis, sessilibus, 70 \times 12, octosporis, aparaphysatis; sporidiis clavatis, apice superiore obtuso, inferiore acutato, rectis, transverse plerumque 3, interdum 4-septatis, cellula suprema plerumque majore, hyalinis, 20-25 \times 5-6, distichis. 5003

Hab. in foliis *Derridis* (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. RAIMUNDO). — Proximae videntur *M. distincta* Henn. et *M. aequalis* Syd.

17. *Micropeltis vagabunda* Speg. — Syll. XI p. 382 — var. *calamincola* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 394. — Peritheciis in foliis haud maculatis sparsis, amphigenis, dimidiato-scutatis, nigris, poro centrali pertusis, convexulis, faciliter ab epidermio solutis, glabris, 300 μ diam., intricato violaceae con- 5004

textis, integre marginatis; ascis fusiformibus, sessilibus, octosporis, filiformi-paraphysatis, $50-60 \times 10-12$; sporidiis 2-3-stichis fusiformibus, utrinque acutatis, rectis, 3-septatis, non constrictis, hyalinis, $15 \times 3-3,5$.

Hab. in foliis *Calami* (Palmae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

18. *Micropeltis Pometiae* Rehm, Ascomyc. Philipp. V, Leaflets of Phil. 5005
lipp. Botany, VI (1914) p. 2229. — Peritheciis in epiphylllo pallidiore sparsis, sessilibus, dimidiato-scutatis, orbicularibus, nigris, glabris, convexulis, mox applanatis, minute papillatis, poro 30μ lato pertusis, $0,5-1$ mm latis, contextu reticulato, violaceo, ad marginem integrum pallidiore, hyphis nullis excurrentibus cinctis; ascis oblongis, apice rotundatis, filiformi-paraphysatis, 100×15 ; sporidiis distichis, fusiformibus, utrinque acutatis, 3-septatis, hyalinis, $25-30 \times 5-6$.

Hab. in foliis *Pometiae pinnatae* (Sapindaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

19. *Micropeltis rhopaloides* Syd., Ann. Mycol. XV, 1917, p. 230. — Thy- 5006
riothechia sparsa, amphigena, plerumque hypophylla, $400-600 \mu$ diam., poro rotundo $25-40 \mu$ lato pertusa, contextu generis, omnino opaco, atro-coeruleo, membrana hyalina ad marginem non vel vix evoluta; asci fusoides, sessiles, paraphysati, $80-115 \times 20-24$, 4-8-spori; sporae clavatae, superne late rotundatae, basim versus angustatae, sed una basi obtusae, 4-5 septatae, tandem leniter constrictae, hyalinae, $26-35 \times 8-9$, cellulis duabus superioribus multo majoribus.

Hab. in foliis *Palaquii* sp. (Sapotaceae), Mt. Maquiling, Ins. Philipp. (C. F. BAKER).

20. *Micropeltis aeruginascens* Rehm, Ascomyc. Philipp. V, Leaflets of 5007
Philipp. Botany, VI (1914) p. 2228. — Ita vocanda *M. applanata* Rehm (Philipp. Journ. Sci. VIII p. 394) non Mont.

MICROPELLELLA Syd., Ann. Mycol. XI, 1913, p. 404 (Ety. a *Micropeltide*, cui affine genus). — Characteres *Micropeltidis* sed defectu paraphysium diversa.

1. *Micropeltella Merrillii* Syd., Philipp. Journ. of Sc. Sect. Bot., IX, 5008
1914, p. 178. — Peritheciis amphigenis, sine maculis, sparsis, superficialibus, facile secedentibus, opace atro-coeruleis lenticulari-scutatis, $250-420 \mu$ diam. marginem versus coerulee pellucidis ibique ex hyphis $1-1,5 \mu$ latis maeandrice denseque conjunctis contextis, praeterea margine hyalino cinctis, ostiolo distincto rotun-

dato 20-25 μ lato; ascis fusosideo-clavatis, sessilibus, aparaphysatis, 60-75 \times 14-18, plerumque octosporis; sporidiis distichis, tereti-clavulatis, apice late rotundatis deorsum attenuatis, rectis vel leniter curvatis, 3-4-septatis, ad septa parum constrictis, hyalinis, 24-30 \times 4-6.

Hab. in foliis *Schefflerae* (Araliaceae), *Glycosmidis cochinchinensis* (Rutaceae), *Celastris paniculati* (Celastraceae), Palawan, Taytay, Ins. Philippin. (MEERILL).

2. *Micropeltella Ramosii* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 5009 562. — Peritheciis hypophyllis, sparsis, sine maculis, superficialibus, facile secedentibus, rotundatis, 700 1000 μ diam., lenticulari scutatis, opace atro-coeruleis, subcarbonaceis, marginem versus pellucidis ibique ex hyphis 1-1,5 μ latis maeandrice denseque conjunctis contextis, praeterea margine angusto subhyalino cinctis, ostiolo rotundo 30-35 μ lato pertusis; ascis clavatis v. fusiformibus, aparaphysatis, 70-90 \times 16-20, 4-6-8-sporis, sporidiis crasse vermiformibus, utrinque late rotundatis, rectis v. inaequilateris, deorsum parum tantum attenuatis, 5-6-septatis, non constrictis, hyalinis, 32-38 \times 9-11.

Hab. in foliis *Cyclostemonis microphylli* (Euphorbiaceae), pr. Angat prov. Bulacan, Ins. Philippin. (M. RAMOS).

3. *Micropeltella paetensis* Syd., Ann. Mycol. XV, 1917, p. 229. — Peritheciis epiphyllis, sine maculis, sparsis, orbicularibus, 600-800 μ diam., reticulatim contextis, atro-caeruleis, margine hyalino nullo, poro 20-30 μ lato apertis; ascis fusoides v. cylindraceutis, aparaphysatis, 4-8-sporis, 95-120 \times 18-20; sporidiis fusosideo-clavatis, 6-8-septatis, non v. leniter constrictis, tandem in loculos secedentibus, 46-60 \times 8-10, loculis mediis minoribus.

Hab. in foliis *Dichapetalis* sp. (Dichapetalaceae), pr. Paete, prov. Laguna et in foliis *Garciniae venulosae* (Guttiferae). M. Maquiling prov. Laguna, Ins. Philipp. (BAKER).

4. *Micropeltella agusanensis* Syd., Ann. Mycol. XV, 1917, p. 229. — Thyriothechia hypophylla, folio immaculato insidentia, dispersa, orbicularia, 500-800 μ diam., atro-coerulea, opaca, ad marginem tantum pellucida et subhyalina, contextu solito generis, poro rotundo 25-35 μ lato pertusis; asci aparaphysati, sessiles, plerumque saccati, 60-70 \times 18-22, octospori; sporae obclavatae, superne late rotundatae, basim versus attenuatae, 5-6-septatae, non constrictae, hyalinae, 24-28 \times 6-8, cellulis fere aequalibus.

Hab. in foliis *Parkiae Sherfeseei* (Leguminosae), Agusan, Mindanao, Ins. Philipp. (M. S. RAZON, SHERFESSEE).

5. *Micropeltella clavispora* Syd., Ann. Mycol. XI, 1913, p. 404. — 5012
 Peritheciis hypophyllis, sine maculis, sparsis, superficialibus, facile secedentibus, opace atro-coeruleis, lenticulari-scutatis, margine alatis, 500-800 μ diam., opace carbonaceis, marginem versus coerulee pellucidis ibique ex hyphis 1-2 μ latis tenuibus maeandrice denseque conjunctis contextis, praeterea margine ca. 25-40 μ lato hyalino ex hyphis 1-2 μ latis anastomosantibus composito cinctis, ostiolo distincto, rotundato, 30-40 μ lato; ascis clavatis vel fusoido-clavatis, sessilibus, aparaphysatis, 90-110 \times 15-20, apice rotundatis, 4-8-sporis; sporidiis plerumque distichis, clavulatis vel fusoido-clavulatis, in maturitate 4-5-septatis, apice late rotundatis, basi rotundatis vel leniter attenuatis, rectis vel leniter curvatis, hyalinis vel subhyalinis, in maturitate ad septa constrictis, 25-37 \times 6,5-9,5, parte superiore, deorsum versus angustioribus.

Hab. in foliis *Mamecyli lanceolati* (Melastomataceae), prov. Pangasinaman ins. Luzon, Philippin. (J. AGAMA).

6. *Micropeltella maquilingiana* Syd., Ann. Mycol. XV, 1917, p. 228. — 5013
 Thyriothecia in epiphylo immutato late dispersa, dimidiata, 600-850 μ diam., orbicularia reticulatim coerulee contexta, ad marginem zonula hyalina usque 30 μ lata cincta, poro minutissimo ca. 10 μ lato pertusa; asci fusiformes, sessiles, aparaphysati, 50-55 \times 12-15, 8-demum plerumque 4-spori; sporae subclavatae, rectae, 5-7-septatae, 35-40 \times 4-5, hyalinae, cellula suprema latiore et 10-12 μ longa.

Hab. in foliis *Aglaiae diffusae* (Meliaceae), Mt. Maquiling, Laguna Philipp. (O. F. BAKER).

7. *Micropeltella camarinensis* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 561. — 5014
 Peritheciis epiphyllis, sparsis, superficialibus, facile secedentibus, orbicularibus, 450-650 μ diam., atro-coeruleis, opacis, marginem versus pellucide coeruleis, ex hyphis 1-1,5 μ latis tenuibus maeandrice denseque conjunctis contextis, ostiolo rotundato 20-30 μ lato pertusis; ascis fusoido-clavatis, sessilibus, octosporis, aparaphysatis, 85-120 \times 20-27; sporis plerumque distichis, subinde tristichis, tereti clavulatis, apice rotundatis, deorsum attenuatis, rectis v. curvatis, semper 2-septatis, constrictis, hyalinis, 36-42 \times 8-10.

Hab. in foliis *Lansii dubii* (Meliaceae), Mount Isarong pr. Camarines Luzon, Ins. Philippin. (H. M. CURREN).

8. *Micropeltella megasperma* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 487. — 5015
 Peritheciis epiphyllis, sparsis, superficialibus, atris, opacis, orbicularibus, 500-900 μ diam., alato-scutatis, marginem versus pellucide coeruleis ibique ex hyphis ca.

1,5 μ latis maeandrice curvatis dense intertextis compositis, praeterea zona tenuissima membranacea hyalina plus minus lata (40-60 μ) saepe latissima (usque ad 160 μ) ex hyphis tenuissimis ca. 1 μ cr. composita cinctis, ostiolo rotundato, 20-25 μ lato, distincto; ascis sessilibus, fusiformi-clavatis vel cylindraceo-clavatis, crasse tunicatis, 150-200 \times 26-35, apapophysatis, 2-8-sporis; sporidiis distichis, oblongo-fusoides, 2-septatis, raro 3-septatis (septis crassis), hyalinis, 65-75 \times 10-16, cellulis subaequilongis, cellula superiore latiore, intus minute granulosis.

Hab. in foliis vivis *Eugeniae* sp. (Myrtaceae), Luzon, Prov. Laguna, St. Antonio, ins. Philipp. — *M. bogoriensi* v. Höhn. proxima.

9. *Micropeltella* ? *maxima* Spegaz., Fungi Costaric. nonn. in Bol. Ac. 5016

Nac. Cienc. Cordoba, t. 23, Extr. p. 213. — Maculae nullae; thyriothecia, membrana basali et margine hyalino destituta, orbicularia maxima 1-2 mm. diam., ostiolo rotundo majusculo (60 μ) pertusa, ambitu vix denticulata, glaberrima, atra fere opaca, dense minuteque sinuoso-prosenchymatica; asci subfusoides maximi, 180-200 \times 25-30, saepius tetraspori apapophysati v. pseudopapophysibus paucis crassis commixti; sporae hyalinae, oblique monostichae, anguste fusideo-subclavulatae maximae, 80-85 \times 10-12, tetramerae, articulis isomacris, primo tunica mucosa tenui junctis, serius nudis ac liberis.

Hab. in foliis vivis *Piperis* speciei ignotae (Piperaceae), prope S. José Costarica, America trop.

10. *Micropeltella microsperma* Syd., Ann. Mycol. XIV, 1916, p. 89. — 5017

Peritheciis hypophyllis, sparsis vel laxe aggregatis, orbicularibus, ambitu subinde lobulatis, 270-320 μ diam., poro rotundo 25-30 μ lato pertusis, contextu flavo-brunneolo ex hyphis 1,5 μ crassis maeandrice curvatis composito, membrana hyalina nulla cinctis; ascis apapophysatis, cylindraceo-clavatis, breviter stipitatis, 70-95 \times 12-14, octosporis, sporidiis distichis, obclavatis, basi late rotundatis, cellula superiore attenuatis, 2-septatis, non constrictis, hyalinis, cellulis duabus extimis 1-2 guttulatatis, media non guttulata, 17-20 \times 3-3,5.

Hab. in foliis *Uncariae guyanensis* (Rubiaceae), Serinal Auristella, Rio Acre, Peruvia (E. ULE).

11. *Micropeltella acensis* Syd., Ann. Mycol. XIV, 1916, p. 89 — Pe. 5018

Peritheciis sparsis, rotundatis, 400-450 μ diam., poro minuto rotundo pertusis, contextu griseo-coeruleo ex hyphis tenuissimis 1-1,5 μ crassis composito, ambitu zona angusta hyalina cinctis; ascis ob-

clavatis, sessilibus, aparaphysatis, $60-75 \times 14-16$, $4-6-8$ -sporis; sporidiis oblique monostichis usque distichis, fusoideo-clavatis, ad apicem obtuse attenuatis, basim versus sensim attenuatis, $4-5$ -septatis, non constrictis, hyalinis, $30-36 \times 4-5$.

Hab. in foliis Sapotaceae, Seringal, S. Francisco, Rio Acre, Brasilia (E. ULE).

12. *Micropeltella bogoriensis* (v. Höhn.) Sydow, l. c., *Micropeltis bogoriensis* v. Höhn., Fragm. z. Mykol. 725, Sitzsb. Akad. Wiss. Wien CXXI, i, p. 346 (1912). — Peritheciis hypophyllis, sparsis, vel laxe gregariis superficialibus, opace caeruleo-atris, inferne lenticularibus et hyalinis, superne circulari-clypeiformibus, $400-700 \mu$ latis, opaco-carbonaceis, ad marginem caeruleo-pellucidis ibique ex hyphis $1.5-2 \mu$ cr. maendricae contextis compositis, margine hyalino 40μ circ. lato praeditis; ostiolo irregulariter circulari, 25μ lato; ascis sessilibus, fusoideo-clavatis, apice rotundatis et crasse tunicatis, $2-3$ -sporis, $125-140 \times 22-25$, paraphysibus nullis; sporidiis distichis, hyalinis, fusoideis vel clavato-oblongis, plerumque paullo curvatis, $3-4$ -cellularibus, granuloso-farctis, $42-54 \times 7-12$, loculo centrali cylindraceo, loculis apicalibus conoideo-rotundatis.

Hab. in foliis coriaceis arboris indet., Buitenzorg, Java.

DICTYOTHYRIELLA Rehm, Broteria XII, 1914, p. 92. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 430. — Est *Micropeltis* sporidiis trilocularibus.

1. *Dictyothyriella Trewiae* Syd., Ann. Mycol. XV, 1917, p. 231. — 5020
Thyriothecia in epiphyllis haud decolorato late dispersa, orbicularia, $300-350 \mu$ diam., reticulatim contexta, atro-coerulea, poro aperta, asci clavati vel fusoidei, sessiles, $45-55 \times 12-15$, octospori, ut videtur parce paraphysati; sporae distichae oblongae, semper 2-septatae, hyalinae, in maturitate constrictae, $13-17 \times 4,5-5$.

Hab. in foliis Trewiae ambiguae (Euphorbiaceae), Mt. Maquiling prov. Laguna, Ins. Philipp. (C. F. BAKER).

2. *Dictyothyriella heterosperma* Syd., Ann. Mycol. XV, 1917, p. 231. — 5021
Thyriothecia in epiphyllis immutato dispersa, dimidiata, orbicularia, $700-1000 \mu$ diam., reticulatim contexta, atro-coerulea, opaca, ad marginem tantum pellucida, praeterea zonula hyalina usque 40μ lata cincta, poro $25-35 \mu$ lato rotundo aperta; asci fusiformes vel obclavati aut cylindracei, sessiles, $130-170 \times 22-26$, paraphysati, $4-8$ -spori, J —; sporae fusoideae, utrinque acutae, hyalinae, plerumque 2-septatae, variabiles, constrictae, $50-72 \times 7-10$, tandem in lo-

culos secedentes, loculo supero plerumque majore 25-40 μ longo.

Hab. in foliis *Malloti Cumingii* (Euphorbiaceae), Los Baños, Ins. Philipp. (C. F. BAKER), *Knemae heterophyllae* (Myristicaceae), Mt. Maquiling et *Nephelii mutabilis* (Sapindaceae), *Diospyris* sp. (Ebenaceae), *M. Maquiling* pr. Laguna (BAKER), *Fici longicaudati* (Moraceae), Los Baños (C. F. BAKER).

3. *Dictyothyriella Bauhiniae* (Rehm) Theiss. et Syd., Ann. Mycol. XV, 5022 1917, p. 430, *Micropeltis Bauhiniae* Rehm, Ascomyc. Philipp. IV, Leaflets of Philipp. Botany, VI (1913) p. 1945. — Peritheciis epiphyllis, non maculiculis, sparsis, dimidiato-scutatis, poro pertusis, nigris, glabris, 200 μ latis, intricato-contextis, fuscis, ad marginem hyalinis, hyphis radiantibus carentibus; ascis oblongis, late sessilibus, apice rotundatis, crasse tunicatis, 30-35 \times 9, paraphysibus filiformibus 2 μ cr. obvallatis; sporidiis (modo intra ascos vivis) distichis, clavatis, 2-septatis, cellula suprema multo majore, rectis, hyalinis, 10-12 \times 3.

Hab. in foliis *Bauhiniae cumingianae* (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

4. *Dictyothyriella mucosa* (Syd.) Sydow, Ann. Mycol. XV, 1917, p. 231, 5023 *Micropeltis muc.* Syd., Ann. Mycol. XIV, 1916, p. 364. — Hypophylla, sine maculis, sparsa; peritheciis orbicularibus, superficialibus, 350-600 μ diam., atro-coeruleis, ad marginem pellucide coeruleis, ex hyphis 1 μ latis tenuibus maeandrice denseque conjunctis contextis, peripherice praeterea zonula angusta hyalina cinctis, ostiolo rotundato 25-30 μ lato pertusis; ascis clavatis, subcylindraceis vel saccatis, superne rotundatis, stipite brevissimo praeditis, 2-4-6-8-sporis, 75-120 \times 20-26; paraphysibus copiosissimis, tenerrimis, copiose patenti-ramosis, sporidiis 1-3-stichis, clavatis, hyalinis, typice 2-septatis, 30-38 \times 8-10, strato mucoso hyalino cinctis, rectis vel curvatis, cellula superiore majore obtuse attenuata, media subquadratica, inferiore angustiorè sed longiore.

Hab. in foliis *Coffeae excelsae* (Rubiaceae), Los Baños, ins. Philipp. (C. F. BAKER).

Sect. 6. Scolecosporae

SCOLECOPELTIS Speng. — Syll. IX p. 1072, XIV p. 646, XVII p. 874, XXII p. 533. — Syn. *Scolecopeltis* v. Höhn. 1909, Syll. XXII p. 534.

1. *Scolecopeltis Garciniae* Rehm, Ascomyc. Philipp. IV, Leaflets of Phy- 5024

lipp. Botany, VI (1913) p. 1946. — Peritheciis in pagina superiore foliorum haud decolorata insidentibus, sparsis, sessilibus, discoidalibus, dimidiato-scutatis, poro perspicuo pertusis, nigris, 1 mm. usque latis, ex hyphis 1-1,5 μ latis fuscis intricato-centrifuge contextis, ad marginem hyphis vix radiantibus, subhyalinis; ascis subfusiformibus, sessilibus, crasse tunicatis, 120-130 \times 20-25, paraphysibus tenerrimis, vix 1 μ cr. intermixtis; sporidiis parallele dispositis, vermicularibus, utrinque subobtusis, 18-ocularibus, ad septa subconstrictis, hyalinis, 100 \times 5-6.

Hab. in foliis *Garciniae venulosae* (Guttiferae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES). — Sporidia immatura modo in asco recognita.

2. **Scolecopeltis Bakeri** Syd., Ann. Mycol. XV, 1917, p. 232. — Thyrio- 5025
thecia hypophylla sine maculis, sparsa dimidiata, orbicularia, 0,5-0,8 mm. diam., reticulatim-coerulee contexta, ad marginem non vel vix hyalina, centro subopaca, poro ca. 30-35 μ lato pertusa; asci oblongo-fusiformes, sessiles, 110-170 \times 20-25, 4-8-spori, paraphysati, sporae subcylindræae, utrinque leniter attenuatae, hyalinae, 10-12-septatae, usque 120 μ longae, 7-10 μ crassae, jam intra ascos in articulos secedentes, articulis mediocribus majoribus (10-12 μ longis).

Hab. in foliis *Aglaiae Harmsianae* (Meliaceae), Mt. Maquiling, *Celtidis philippinensis* (Ulmaceae), Los Baños et *Tetrastigmatidis sepulchrae* (Vitaceae), Mt. Maquiling (C. F. BAKER).

3. **Scolecopeltis Connari** Syd., Ann. Mycol. XV, 1917, p. 232. — Thy- 5026
riothechia in hypophyllo immutato sparsa, dimidiata, orbicularia, 400-500 μ diam., reticulatim coerulee contexta, zonula hyalina usque 30 μ lata circumdata, poro 20 μ lato pertusa; asci fusiformes, 80-125 \times 22-28, octospori, paraphysati, J —; sporae 2-3-stichae, cylindræo-clavatae, rectae, 6-7-septae, 50-65 \times 6-7, mox in articulos saepe valde in equales secedentes, hyalinae.

Hab. in foliis *Connari neurocalycis* (Rosaceae), pr. Paete, Laguna, Ins. Philipp. (C. F. BAKER).

Trib. 2. **Thrausmatopeltinae** Theiss.

Sect. 1. **Hyalosporae**

HAPLOPETTIS Theiss., Broteria XII, 1914, p. 88. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 430. — Membrana brunnea, contextu

polygonali donata, margine ex hyphis elongatis fibrillosa, mycelio proprio nullo praedita, poro centrali circulari. Hymenium simplex polyascum. Paraphyses nullae. Sporidia unilocularia hyalina.

1. *Haplopeltis bakeriana* (Rehm) Theiss. l. c., *Myiocopron bakerianum* 5027
Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 393. — Peritheciis scutato-dimidiatis, orbicularibus, convexulis, distincte minute papillulatis, poro pertusis, nigris, 250-300 μ latis, singularibus, mox in maculas nigrículas late effusus confluentibus, parenchymatice fusce contextis, ad marginem hyphis paucis fusciculis radiantibus; ascis clavatis, apice rotundatis, sessilibus, 50 \times 10-12, octosporis, paraphysatis; sporidiis distichis, ellipsoideis, rectis, 1-cellularibus, non guttatis, hyalinis, 12-15 \times 5.

Hab. in ramis putrescentibus *Passiflorae quadrangularis* (Passifloraceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Ascis clavatis, non ovoideis et sporidiis ellipsoideis praecipue dignoscenda. A proxima *H. millepunctata* (Penz. et Sacc.) distinguitur papillis evidentibus.

Sect. 2. Hyalodidymae

MICROTHYRIELLA v. Höhnelt, *Fragm. z. Myk.* VI, 1909, p. 244. — Theiss. et Syd., *Ann. Mycol.* XV, 1917, p. 431. — *Microthyrium* Syll. XXII p. 517. — A *Clypeolo* differt paraphysibus nullis. — Typ. gen. *Micr. Rickii* (Rehm) v. Höhn. l. c.

1. *Microthyriella philippinensis* Syd., *Ann. Mycol.* XI, 1913, p. 405, XV, 5028
1917, p. 235. — Peritheciis epiphyllis, singulis etiam hypophyllis, sine maculis et sine mycelio, orbicularibus, sparsis, 150-400 μ diam., omnino superficialibus, tenuissimis, planis, scutato-dimidiatis, atris, haud ostiolatis, pariete superiore tantum bene evoluto ex uno strato cellularum quadratarum vel varie angulatarum saepe irregularium 3,5-5 μ latarum obscure olivaceo-brunnearum composito, margine angusto hyalino tenuissimo cinctis; ascis copiosis, sessilibus, globosis, subglobosis vel ovatis, 34-46 \times 25-34, octosporis; paraphysibus irregulariter ramosis, haud typicis, plectenchymatice connatis, submucosis; sporidiis parallele positis, oblongo-fusiformibus, utrinque rotundatis vel cellula basali saepe attenuatis, medio 1-septatis et non constrictis, hyalinis, 18-26 \times 9-10, cellula superiore saepe paullo latiore.

Hab. in foliis vivis *Aglaonematis* (Araceae), *Lepisanthis schizolepis* (Sapindaceae), *Evonymi japonici*

(Celastraceae), *Bauhinia Cumingiana* (Leguminosae),
Los Baños ins. Philippinensium (S. A. REYES, C. F. BAKER).

2. *Microthyriella uleana* Syd., Ann. Mycol. XIV, 1916, p. 89. — Pe- 5029
ritheciis epiphyllis, mycelio nullo, superficialibus, orbicularibus,
sparsis, 150-250 μ diam., tenuissimis, planis, scutato-dimidiatis,
atris, laud ostiolatis, pariete superiore tantum bene evoluto ex
uno strato cellularum quadratarum vel varie angulatarum 3,5-5 μ
latarum olivaceo-brunnearum composito, margine angusto hyalino
tenuissimo cinctis; ascis sessilibus, subglobosis vel ovato-globosis,
50-65 \times 40-45, octosporis; paraphysibus genuinis nullis; sporidiis
parallele positis, fusiformibus, rectis vel inaequilateris, utrinque
obtusè attenuatis, medio 1-septatis et vix vel leniter constrictis,
hyalinis, 35-42 \times 8-11.

Hab. in foliis *Hippocratea*, Seringal Anristella, Rio Acre,
Peruviae (E. ULE).

- POLYCLYPEOLUM** Theiss., Ann. Myc. XII, 1914, p. 67. — Theiss. et 5030
Sydow, l. c. XV, 1917, p. 431. — Est *Microthyriella astoma* apa-
raphysata. Disci ascigeri plurimi Sporidia hyalodidyma. — Typ.
gen. *Pol. Abietis* (v. Höhn. ut *Polystomella*) Th., l. c.

SCHIZOTHYRIUM Desm. — Syll. II p. 723, IX p. 1100, XIV p. 710,
XVI p. 657, XVII p. 892, XXII p. 557. — Syn. *Epipeltis* Theiss.,
Abh. zool. bot. Ges. Wien. Bd. VII, 1913, N. 3., p. 30.

1. *Schizothyrium annuliforme* Syd. et Butl., Ann. Mycol. IX, 1911, p. 5031
376 — Stromatibus epiphyllis, maculis majusculis decoloratis in-
determinatis effusis insidentibus plerumque concentrice v. annula-
tim dispositis saepissime biformibus, interioribus majoribus et 2-4
mm. longis subinde confluentibus, marginalibus minoribus 0,5-1,5
mm. diam., rotundatis v. oblongis, confluendo subinde irregulari-
bus, basi immersis, planis, atris, rimis elongatis apertis; ascis cla-
vatis, deorsum in stipitem longissimum attenuatis, superne obtusis,
cum stipite 75-130 \times 10-13, p. sp. 30-50 μ longa, octosporis; para-
physibus filiformibus, paucis; sporidiis subdistichis, oblongo-ellip-
soideis v. oblongis, utrinque rotundatis, continuis, hyalinis v. sub-
hyalinis, 10-15 \times 3-5.

Hab. in foliis vivis *Aceris oblongi* (Aceraceae), Mussoorie
Indiae or. (E. J. BUTLER). — Dubium an gen. *Schizothyrio* adscribenda
species, certo *Criellae Aceris-laurini* (Pat.) Sacc. et Syd. et *Schizo-*
thyrii Aceris (P. Henn. et Lind.) Pat. diversa.

EREMOTHECA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 235 et p. 431. — A *Eremothecella* differt praecipue sporidiis hyalodidymis. — Sec. v. HÖHNEL (Ber. Deutsch. Bot. Ges. 36., 1918, p. 32) gen. *Eremotheca* ut synonym. gen. *Microthyriellae* v. H. habendum.

1. *Eremotheca philippinensis* Syd., Ann. Mycol. 15., 1917, p. 235 — ? Syn. 5032
Rhytisma rufulum B. et C., Syll. VIII p. 757. — *Thyriothecia* in epiphylllo haud maculato late dispersa, plana. orbicularia, 1 mm. diam., haud papillulata, parenchymatice e cellulis 3 4 × 2-3 contexta, brunneola, ad marginem 30-50 μ late hyaline marginata; asci ovati vel ovato-globosi, 70-80 × 30-55, crassiuscule tunicati, 8-sporei, apophysati J —; sporae oblongae, rectae vel inaequilateres, hyalinae, medio septatae, non constrictae, utrinque obtusae, 42-55 × 12-14.

Hab. in foliis *Celtidis philippinensis* (Ulmaceae), Los Baños, Laguna, *Strombosiae philippinensis* (Olacaceae), Mt. Maquiling Ins Philipp., *Garciniae venulosae* (Guttiferae), et *Xanthophylli* sp. (Polygalaceae), (C. F. BAKER). — Sec. v. HÖHNEL (Ber. Deutsch. Bot. Ges. 36., 1918, p. 312) *Microthyriellae* species haec ut synonym. *macrospora* v. Höhn. habenda.

Sect. 3. Hyalophragmiae

PHRAGMOTHYRIELLA v. Höhn., Fragm. z. Myk. XIV, 1912, n. 725. — Theiss. et Syd., Ann. Myc. XV, 1917, p. 431. — A gen. *Micropeltis* differt peritheciis contextu e cellulis parvulis non radiantibus nec marginem excedentibus composito; cetera conformia; a *Microthyriella* sporidia hyalophragmia. — Typ. gen. *Phr. molleriana* (Sacc.) v. Höhn., *Phr. orbicularis* (Zimm.) v. Höhn.

1. *Phragmothyriella Bakeri* Rehm, Ascom. Philipp. V, p. 2230 (1914) 5033
cfr. v. Höhn., Fragm. Mycol. p. 8. — Peritheciis gregariis, sessilibus, dimidiato-scutellatis, glabris, nigris, 200 μ diam., poro orbiculari 20 μ diam., lato pertusis, contextu pseudoparenchymatico fusco ex cellulis parvulis, non radiantibus nec marginem excedentibus formato; asci clavatis 70 × 9, octosporis; sporidiis fusoideis, rectis, 5-septatis, non constrictis, hyalinis, distichis, 15-20 × 4; paraphysibus filiformibus.

Hab. ad folia *Schizostachyi* emortui (Graminaceae), et *Eugeniae* (Myrtaceae), Los Baños; Luzon ex Philipp. (REYES, BAKER).

EREMOTHECELLA Sydow, Ann. Mycol. XV, 1917, p. 236. — Thyriothecia irregulariter pseudoparenchymatice contexta, fuscidula, mycelio nullo; hymenia in quoque thyriothecio, monasca. Asci ovato-globosi, aparaphysati. Sporidia oblongo-clavata, hyalina, transverse pluriseptata.

1. **Eremothecella calamicola** Syd., l. c. — Thyriothecia epiphylla, di- 5034
spersa vel laxe aggregata orbicularia, 400-800 μ diam., fuscidula, irregulariter parenchymatice contexta, marginem versus contexta plus minus radiante et dilutior, saepe subhyalino, poro carentia; hymenia per totum thyriothecium dispersa, monoasca; asci subglobosi, 40-52 \times 32-40, octospori; sporae oblongo-clavatae, immaturae breviores et 3-4-septatae, maturae longiores et 5-6-septatae, constrictae, rectae vel saepius leniter curvatae, cellula superiore et subinde etiam secunda plus minus majore, utrinque rotundatae, 28-35 μ longae, superne 9-11 μ latae, inferne 5-7 μ latae.

Hab. in foliis *Calami* sp. (Palmae), Mt. Maquiling, Laguna, Ins. Philipp. (C. F. BAKER). — Sec. v. HÖHNEL (Ber. Deutsch. Bot. Ges. 36., 1918, p. 312) est Lichen (= *Arthoniopsis* Müll., sec. ZAHL-BRUCKNER

Trib. 3. Plochrompeltineae

PLOCHMOPELTIS Theiss., Broteria XII, 1914, fasc. 2., p. 87. — Theiss. 5035
et Syd., Ann. Mycol. XV, 1917, p. 432. — Mycelium reticulatum septatum, exhyphopodiatum, subhyalinum. Thyriothecia astoma, contextu floccoso-meandriformi. Hymenium monasceum. Asci subglobosi aparaphysati. Sporidia hyalodidyma. — Typ. gen. *Pl. intricata* (E. et M. ut *Asterina*) Theiss. l. c.

STOMIOPELTIS Theiss., Broteria XII, 1914, p. 85. — Theiss. et Sy- 5036
dow, Ann. Mycol. XV, 1917, p. 432. — A *Plochrompeltis* differt thyriotheciis poro centrali praeditis, hymenio polyasco, paraphysibus praesentibus. Sporidia hyalodidyma. — Typ. gen. *Stom. aspersa* (Berk. ut *Asterina*) Th., l. c.

STOMIOPELTELLA Theiss., Broteria XII, 1914, p. 86. — Theiss. et Syd., 5037
Ann. Mycol. XV, 1917, p. 432. — Est *Stomiopeltis* paraphysibus destitutum. — Typ. gen. *Stom. nubecula* (B. et C. ut *Asterina*) Th. l. c., *St. patagonica* (Speg. ut *Microthyrium*) Th., l. c.

CHAETOPELTOPSIS Theiss., Ann. Mycol. XI, 1913, p. 496. — Theiss. 5038
 et Sydow, Ann. Mycol. XV, 1917, p. 432. — Mycelium reticulatum,
 pallide brunneolum, septatum, exhyphopodiatum. Thyriothecia con-
 textu floccoso-meandriiformi, brunnea, setulis acutis brunneis sep-
 tatis praedita, poro centrali praedita. Hymenium simplex aparaphy-
 satum. Asci ovato-clavati supra incrassati, octospori. Sporidia hya-
 lina bilocularia. — Typ. gen. *Chaet. tenuissima* (Petch ut *Asterina*)
 Th., l. c.

GENERA INCERTAE SEDIS

ACTINOPELTE Sacc., Ann. Mycol. XI, 1913, p. 315 (Etym. *actin* radius
 et *pelte* scutum). — Perithecia superficialia, dimidiata, plano-convexa,
 membranacea, atra, poro pertusa, ambitu subcircularia, contextu
 eximie radiato, margine profunde fimbriato-fisso, cellulis furcato-
 ramosis, marginalibus liberis et spinuliformibus, appressis. Asci
 pauci (6-9) breviter ovato-ellipsoidei, monospori, breviter crassius-
 culae stipitati. Sporidia ascum implentia, continua, nubilosa, sub-
 hyalina. — Notis datis et imprimis ascis majusculis, monosporis,
 genus, ut videtur, praedistinctum, etsi quoad sedem, paradoxum.

1. *Actinopelte japonica* Sacc., l. c. p. 315. — Characteres generis; pe- 5039
 ritheciis in maculis minutis subcircularibus pallidis epiphyllis pau-
 cis gregariis, punctiformibus, 220-240 μ diam., nigricantibus; peri-
 thecii contextus cellulis elongatis, 4-5 μ cr.; ostiolo circulari im-
 presso; ascis 35-42 \times 28-33, episporio tenui levi 1 μ cr., pedicello
 crassiusculo tereti, asco brevior; sporidio ascum implente diu hya-
 lino, demum dilute brunneolo.

Hab. in foliis nondum emortuis *Castaneae vescae* var.
japonicae (Fagaceae), Japonia Prov. Mino, Kawaue-mure, Ja-
 poniae (K. HARA).

PHAEOSCUTELLA P. Henn. — Syll. XVII p. 872.

1. *Phaeoscutella maquilingiana* Sacc., Notae Mycol. XXIII p. 62 (Acc. 5040
 Ven.-trent. 1917). — Peritheciis late remotiuscule gregariis, opae
 nigris, convexulis, dimidiatis, astomis, 240 μ diam.; contextu ra-
 diato, fuligineo, ambitu fimbriato; ascis ovato-ellipsoideis, minutis-
 simis, sessilibus, apice obtusioribus, aparaphysatis, octosporis, 16-
 18 \times 14; sporidiis subtetrastichis v. conglobatis, teretiusculis, utrin-
 que rotundatis, leviter curvis, 12 \times 3, olivaceo-fuligineis, 3-septatis,
 non constrictis.

Hab. in vaginis emortuis *Schizostachyi acutiflori* (Graminaceæ), M. Maquiling, ins. Philipp. (BAKER). — A typo generis contextu distincte radiato recedit.

CHAETOPLACA Syd., Ann. Mycol. XV, 1917, p. 232 et p. 432. — Membranae superficiales, unistratosae, primitus continuae conidiiferae tandem porose ruptae, contextu indistincte radiante, irregulariter pseudo-parenchymatico, setis numerosis rigidis obsitae; hymenia copiosa in quoque thyriothecio, monasca, membrana basali tenui. Asci plus minus aequaliter dispersi, clavati, 8-spori, aparaphysati. Sporae bicellulares hyalinae in maturitate ut videtur brunneolae.

1. **Chaetoplaca Memecyli** Syd., l. c., fig. 1. — Membranae hypophyllae, 5041 dispersae, orbiculares, 1-2 mm. diam., omnino superficiales, fere atrae, sub micr. pallide fuscae, ad marginem subhyalinae, unistratosae, ex hyphis subradiantibus vel fere meandrice curvatis 3-5 μ cr. copiose septatis (articulis 4-9 μ longis), contextae, setis numerosis rigidis erectis unicellularibus obscure brunneis plerumque irregulariter dispositis subinde etiam seriatim ordinatis 30-55 μ long. inferne 3-4 μ cr. ad apicem acutis basi immersis ubique dense obsitae, primitus continuae, tandem, praecipue centro, porose ruptae; stratum hymeniale 50-80 μ cr. hyalinum fibroso-gelatinosum, hymenia plurima monasca includens, membrana basali tenui hyalina; asci plus minus aequaliter denseque dispositi, clavati, 50-65 \times 16-19, ad apicem incrassati, ad basim breviter pedicellati v. subsessiles, octospori, aparaphysati; sporae distichae, obovato-ellipsoideae v. ovato-oblongae, ad apicem rotundatae, ad basim rotundatae v. leniter attenuatae, bicellulares, cellulis fere aequalibus non v. vix constrictae, leves, 16-18 \times 7-8, hyalinae, in maturitate verisimiliter brunneolae.

Hab. in foliis *Memecyli* sp. (Melastomataceae), Bataan, Ins. Philipp. (M. RAMOS).

HORMOPELTIS Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 84 (1912). — Perithecia dimidiato-scutata, subiculo plane destituta. Asci octospori, paraphysati. Sporidia linearia in articulos plures scissilia, hyalina. — Sec. Theiss. et Syd., Ann. Myc. XV, 1917, potius *Scolecopeltopsis* paraphysata.

1. **Hormopeltis Bomplandi** Speg., loc. cit., c. ic. — Peritheciis saepissime hypophyllis, copiose sparsis, discoideis, 400-500 μ diam., tenui-membranaceis, centro coriacellis, astomis, ambitu hyalinis anhystrisque, matrici arcte adpressis; ascis obclavatis, medium supra

attenuatis apiceque crassiuscule tunicatis, basi rotundatis, subsessilibus, $110 \approx 22$, paraphysibus filiformibus parum longioribus cinctis; sporidiis cylindraceo-clavatis, $35-65 \mu$ longis, apice $7-8 \mu$ cr., basi tantum $3-4 \mu$, in articulos 9-11, magnitudine decrescentes, superpremis ovalibus vel ellipsoideis, infimis subglobosis dissilentibus, hyalinis.

Hab. ad folia viva *Strychni* sp. (Loganiaceæ), in dumetis prope Bompland, Misiones, Argentina.

MYIOCOPRELLA Sacc., Notae Mycol. XX, in Nuovo Giorn. bot. it. 23., 1916, p. 199 (Etym. a *Myiocopro* cui affinis). — Perithecia dimidiata, convexo-applanata, atra, subastoma; contextu duriusculo e centro radiato anguste prosenchymatico, ad marginem eroso-fimbriato pallido. Asci parallele stipati, obovati, exigui ex hypothecio tenuissime celluloso flavido nascentes, polyspori. Sporidia oblonga, hyalina. — Imprimis ascis polysporis genus distinguendum videtur.

1. *Myiocoprella Bakeri* Sacc., l. c. — Peritheciis amphigenis sed saepius hypophyllis, solitariis v. aggregatis, convexo-applanatis, rugulosis, aterrimis, $0,7-1$ mm., margine fimbriato-subspinulosis; ascis obovatis, crasse (praecipue apice) tunicatis, $20-22 \approx 11-12$, basi obtuse tenuatis, sessilibus, polysporis; sporidiis polystichis tereti-oblongis, utrinque obtusulis, $4-5 \approx 1$, hyalinis.

Hab. in foliis vivis v. languidis *Aspidii* sp. (Filices), Paete, Laguna, Ins. Philipp. — Non inficior fungillum, mihi visum singularem, esse denuo inquirendum, nam specimina observata non prorsus matura videntur [P. A. Sacc.].

SACCARDINULA Speg., — Syll. IX p. 1071, XIV, p. 692, XVI p. 645, XXII p. 532.

1. *Saccardinula xylosmicola* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 83. — Peritheciis amphigenis, saepius epiphyllis, sparsis, minutis, astomis, dimidiato-scutatis, $150-200 \mu$ diam., margine longiuscule fimbriatis, atris, rigidulis, contextu centro indistincte parenchymatico, ambitu plus minusve manifeste prosenchymatico et pallidiore; ascis obovatis, $4-6-8$ -sporis, $50-60 \approx 30-40$, cito diffluentibus ac mucro densiusculo cinctis; sporidiis conglobatis, elongato-ellipsoideis, saepius leniter inaequilateris transverse 7-septatis, ad septa leniter constrictis, loculis paucis vel pluribus septo longitudinali continuo vel interrupto percursis, hyalinis, $35-45 \approx 12-19$; loculis saepius grosse 1-guttatis

Hab. ad folia viva *Xylosmae pubescentis* (Flacourtiaceae), in dumetis prope Calilegua, Jujuy, Argentina.

NISSLELLA v. Höhn., Ber. deutsch. bot. Ges. XXXVI, 1918, p. 468. — 5045

Subiculum nullum; perithecia contextu distincte radiato donata, supra laciniato-aperta et disco ascigero erumpenti praedita; excipulum praesens v. nullum. Paraphyses filiformes simplices. Asci clavati octospori. Sporidia elongata hyalina. demum 2-(usque 4-?) locularia. — Typus gen. *Niesslella scirpicola* (Fuck. in Micropeziza) v. H. Sistit autem *Niesslella aurantiaca* (Rehm in Belonidium) v. H.

ACTINOMYXA Syd., Ann. Mycol. XV, 1917, p. 146. — Thyriothecia superficialia, simplicia, contextu prosenchymatico radiante mox hytolysis ope in corpuscula irregularia dissoluta, mycelio nullo. Asci cylindraceo-clavati, paraphysati, octospori. Sporidia clavulata, hyalina, transverse pluriseptata.

1. *Actinomyxa australiensis* Syd., l. c. — Peritheciis hypophyllis, sparsis, punctiformibus, in tomento folii nidulantibus, superficialibus, atris, planiusculis, 300-350 μ diam., contextu opaco centrali mox histolysis ope in corpuscula irregularia, minuta v. majora dissoluta, peripherice dilutiora v. fere subhyalina ibique ex hyphis variae crassitudinis 3-6 μ cr. composita, articulis longiusculis; ascis copiosis, radiantibus, tereti-clavatis, ad apicem rotundatis, subsessilibus, v. brevissime pedicellatis, 56-65 \times 8-10, octosporis, copiose paraphysatis; sporidiis distichis, clavulatis, hyalinis, ad apicem rotundatis, ad basin saepius leviter tenuatis, 3-septatis, non constrictis, 18-22 \times 2-4. 5046

Hab. in foliis *Lasiopetali ferruginei*, var. *cordati* (Sterculiaceae), in M. Wilson, Australiae (MAIDEN).

Fam. 3. Dothideaceæ NITSCHKE *)

Dispositio systematica (p. p. emendata) sec. Theiss. et Syd. in l. c.

Subf. 1. Dothideaeae

Stroma prosenchymaticum v. plus minus parenchymaticum, nodulosum v. depressum, stratu superiori distincto destitutum, superficialiter hypostromate intramatrici praedito v. centro aduato v. immerso. Loculi rotundati stromate immersi.

*) Conferenda est Monographia cll. F. THEISSEN et H. SYDOW: *Die Dothideales, Kritisch-systematische Originaluntersuchungen* (Ann. Mycol. 13., 1915, p. 149). Opus mi-

Trib. 1. **Coccoideae**

Stroma superficiale, centro immersum

A. Stroma centro sterile, loculi circulariter distributi

- | | |
|--|--------------------------|
| 1. Sporidia unilocularia hyalina (etiam 4-loc. f),
stromata levia, paraph. praes. | YOSHINAGELLA v. Höhn. |
| 2. Sporidia brunnea bilocularia; stromata periphærice hyphis tecta, paraph. praes. | |
| a) Loculi rotundati periphærice disjuncti | TRICHODOTHIS Th. et Syd. |
| b) Loculi circulariter periphærice confluentes | PERISCHIZON Syd. |

B. Stroma aequaliter fertile

- | | |
|---|---------------------------|
| 1. Sporidia unilocularia | |
| a) filiformia, hyalina, paraph. praes. | SCHWEINITZIELLA Speg. |
| b) ellipsoidea, hyalina, paraph. nullae | COCCOSTROMA Th. et Syd. |
| c) ellipsoidea, brunnea, paraph. praes. | AUERSWALDIELLA Th.-Syd. |
| 2. Sporidia bilocularia | |
| a) Sporidia inaequaliter septata; loculo inferiori papilliformi, hyalino, superiori brunneo ellipsoideo, paraph. praes. | COCCODISCUS P. Henn. |
| b) Sporidia subaequaliter divisa | |
| α Sporid. hyalina, paraph. praes. | MICROCYCLUS Sacc. |
| β Sporid. hyalina, paraph. nullae | COCCOIDEELLA v. H. |
| γ Sporidia brunnea, paraph. praes. | COCCODOTHIS Th. et Syd. |
| ς Sporidia brunnea, paraph. nullae | COCCODOTHELLA Th. et Syd. |
| 3. Sporidia trilocularia, hyalina; paraph. praes. | COCCODIELLA Hara |
| 4. Sporidia quadrilocularia, hyalina; paraph. nullae | ELMEROCOCCUM Th. et Syd. |

Trib. 2. **Levellleae**

Stroma superficiale, lata basi sessile; hypostroma intramaticale

- | | |
|---|---------------------------|
| 1. Sporidia bilocularia hyalina; paraph. nullae | MICROCYLELLA Th. |
| 2. Sporidia bilocularia brunnea | |
| a) Paraph. praes., mycelium distinct. praes. | LEVILLELLA Th. et Syd. |
| b) Paraph. praes., mycelium distinct. nullum | ENGLERODOTHIS Th. et Syd. |

crotheconicae exquisite paratum et magnae molis. Genera numerosissima (140!) in quae ab Auctoribus Familia (jam ex 16 generibus composita) haec discerpitur, plerumque fabrica stromatis, loculorum dispositione, etc. innituntur. Et idem dici potest de generibus Microthyriacearum et Hemihysteriacearum s. lato, quarum primitus vix 30 adnumerabantur, quae vero nunc Rev. Theissen ad circ. 100 elevat! An haec nova genera sint omnia justa et valida, futura aetas pronuntiabit (P. A. Saccardo in ms. 1917).

- c) Paraph. nullæ; mycelium distinct. nullum LEVEILLEINA Th. et Syd.
 d) Paraph. nullæ; myc. nullum, stroma pilosulum DISCODOTHIS v. H.
 3. Sporidia filiformia TRICHOCHORA Th. et Syd.

Trib. 3. Dothideæ

Stroma innato - erumpens

1. Sporidia unilocularia

I. Sporidia hyalina

- a) Sporidia incurvata (valsoidea) DOTHIDEOVALSA Sp.
 b) » ellipsoidea, paraph. praes., asci 3-spore ZIMMERMANNIELLA P. H.
 c) » » » » » , asci 8-spore BAGNISIOPSIS Th. et Syd.
 d) » » » » » , paraph. nullæ, stroma regular. pulvinatum AMERODOTHIS Th. et Syd.
 e) Loculi distincti supra tantum confluentes CATABOTRYS Th. et Syd.

II. Sporidia brunnea, paraph. nullæ

AUERSWALDIA Sacc.

III. Sporidia brunnea, paraph. praes.

DOTHIDINA Th. et Syd.

2. Sporidia bilocularia

- a) » hyalina, paraph. praes. ULEODOTHIS Th. et Syd.
 b) » » » , paraph. nullæ DOTHIDELLA Speg.
 c) » brunnea, paraph. nullæ SYSTREMA Th. et Syd.
 d) » » » , paraph. praes. ACHORELLA Th. et Syd.

3. Sporidia trilocularia, hyalina

METAMERIS Th. et Syd.

4. Sporidia quadrilocularia hyalina, paraph. nullæ

PHRAGMODOTHELLA Th.
et Syd.

5. Sporidia quadrilocularia brunnea, paraph. nullæ

PHRAGMODOTHIS Th.
et Syd.

6. Sporidia muralia brunnea, paraph. nullæ

DICTYODOTHIS Th. et Syd.

Subf. 2. Phyllachoreæ (Theiss. et Syd.)

Stromata subcuticularia v. epidermica, semper tecta, clypeo epidermali v. cuticulari praedita, prosenchymatico-dothideacea v. plus minus irregulariter hyphenchymatica. Loculi in stromate v. in mesophyllo nidulantes, apice clypeo connexi.

Trib. 1. Trabutinae

Stroma inter cuticulam et epidermidem eformatum

1. Sporidia unilocularia

- a) Sporidia hyalina; paraph. praes. TRABUTIA Sacc.-Roum.
 b) » paraph. nullæ TRABUTIELLA Th. et Syd.
 c) » brunnea unilocularia; paraph. nullæ PHAEOTRABUTIELLA Th.
et Syd.

2. Sporidia bilocularia

- a) Sporidia hyalina, loculi inaequales; paraph. praes. MUNKIODOTHIS Th. et Syd.

- | | |
|--|--------------------------|
| b) Sporidia hyalina, loculi inaequales; paraph. nullae | OMPHALOSPORA Th. et Syd. |
| c) Sporidia hyalina, loculi aequales; paraph. praes. | KEHMIDOTHIS Th. et Syd. |
| d) Sporidia hyalina, loculi aequales; paraph. nullae | EURYACHORA Fuck. |
| e) Sporidia brunnea; paraph. praes. | COCCOCHORA v. H. |
| f) Sporidia brunnea; paraph. nullae | THYRIOPSIS Th. et Syd. |
| 3. Sporidia trilocularia, brunnea; paraph. praes. | DERMATODOTHIS Rac. |
| 4. Sporidia quadrilocularia, hyalina; paraph. praes | CAMAROTELLA Th. et Syd. |

Trib. 2. Scirrhiinae

Stroma subepidermicum

- | | |
|--|-----------------------------|
| A. Stroma rotundatum v. irregulare, nec lineare; loculi poris distinctis praediti: | Catacanmineae |
| 1. Sporidia unilocularia | |
| a) Sporidia hyalina exappendiculata; paraph. praes. | CATACAUMA Th. et Syd. |
| b) Sporidia hyalina exappendiculata; paraph. nullae | CATACAUMELLA Th. et Syd. |
| c) Sporidia hyalina appendiculata; paraph. praes. | SCHIZOCHORA Syd. |
| d) Sporidia brunnea; paraph. nullae | PHAECHORA v. H. |
| e) Sporidia brunnea; paraph. praes. | PHAECHORELLA Th. et Syd. |
| 2. Sporidia bilocularia | |
| a) Sporidia hyalina, loculi inaeq.; paraph. praes. | ANISOCHORA Th. et Syd. |
| b) Sporidia hyalina, loculi aequ.; paraph. praes. | PLACOSTROMA Th. et Syd. |
| c) Sporidia brunnea; paraph. praes. | PHAEODOTHIOPSIS Th. et Syd. |
| 3. Sporidia 4-locul., hyal.; paraph. praes. | PHRAGMOCAUMA Th. et Syd. |
| 4. Sporidia filiformia; paraph. praes. | SCOLECOTHIS Th. et Syd. |
| B. Stroma lineare rima elongata comuni apertum: | Eu-Scirrhiinae |
| 1. Sporidia bilocularia hyalina | |
| a) Loculi spor. aequales; paraph. nullae | SCIRRHIA Nke. |
| b) Loculi ut supra; paraph. praes. | SCIRRHODOTHIS Th. et Syd. |
| c) Loculi spor. inaequales; paraph. nullae | APIOSPORA Sacc. |
| 2. Sporidia 3-locularia; paraph. praes. | SCIRRHOPHRAGMA Th. et Syd. |
| 3. Sporidia 4-plurilocularia | |
| a) Sporidia hyalina; paraph. praes. | EXARMIDIUM Kar. |
| b) Sporidia brunnea; paraph. praes. | RHOPOGRAPHUS Nke. |
| c) Sporidia brunnea; paraph. nullae | RHOPOGRAPHINA Th. et Syd. |

Trib. 3. Phyllachorinae

Stroma in mesophyllo immersum

- | | |
|-------------------------------------|------------------|
| 1. Sporidia 1-locularia | |
| a) Sporidia hyalina; paraph. praes. | PHYLLACHORA Nke. |

- b) Sporidia hyalina; paraph. nullae
c) Sporidia brunnea; paraph. praes.
2. Sporidia 2-locularia
- a) Loculi sporid. inaequales, loculo sup. hyalino; paraph. praes.
b) Loculi ut supra; loc. sup. brunneo, infer. papilliformi; paraph. praes.
c) Loculi sporid. aequales; sporid. hyal.; paraph. praes.
d) Loculi et sporidia ut supra; paraph. nullae
e) Sporidia brunnea; paraph. praes.
3. Sporidia 4-locularia
- a) Sporidia hyalina; paraph. praes.
b) Sporidia hyalina; paraph. nullae
c) Sporidia brunnea; paraph. praes.
d) Sporidia brunnea; paraph. nullae
4. Sporidia muralia brunnea
- a) Paraphys. nullae
b) Paraphys. praesentes
5. Sporidia filiformia
- PHYLLACHORELLA Syd.
SPHAERODOTHIS She.
STIGMOCHORA Th. et Syd.
COCCOCHORELLA v. H.
ENDODOTHELLA Th. et Syd.
OLIGOSTROMA Syd.
PHAERODOTHIS Syd.
TELIMENA Rac.
PHRAGMOCARPELLA Th.-Syd.
HOMOSTEGIA Fuck.
CLYPEOSTROMA Th. et Syd.
DICTYOCHORA Th. et Syd.
DICTYOCHORELLA Th. et Syd.
OPHIODOTHELLA v. H.

Subfam. 3. Montagnellaeae Th. et Syd.

Loculi distincti in mesophyllo immersi perithecioidi, stromate distincto destituti v. subhyphenchymatico tantum praediti, apice epidermide emergentes; v. in stromate basali insidentes, v. in stromate distincto solitarii.

Trib. 1. Eu-Montagnellae

Loculi in mesophyllo immersi v. in stromate subcorticali distincte adnati, diu immersi v. prominuli:

1. Sporidia 1-locularia hyalina
- a) Loculi singuli in mesophyllo: stroma distinctum nullum; paraph. praes.
b) Loculi stromatici; paraph. nullae
2. Sporidia bilocularia
- a) Sporidia hyalina; paraph. nullae; stroma distinct. nullum
α) Loculi singuli disjuncti diu immersi apice nodulosi
β) Loculi conferti, emergentes, apice non incrassati
b) Sporidia hyalina; paraph. nullae; stromatica
α) Loculi irregulariter distributi
- HAPLOTHECIUM Th. et Syd.
MONTAGNELLINA v. H.
HAPLODOTHIS v. H.
PSEUDOSPHAERELLA v. H.
DIPLOCHORELLA Syd.

- β) Loculi circulariter dispositi
 γ) Loculi lineariter dispositi
 e) Sporidia brunnea; stroma dist. nullum; paraph. praes.
 d) Sporidia brunnea; stroma praesens; loculi irregular. distributi; paraph. nullae
 e) Sporidia, stroma et paraph. ut supra; loculi ramoso-radiantes
 3. Sporidia 4-locul. brunnea; paraph. praes.; stromatica
 4. Ut supra; paraph. nullae
 5. Sporidia muralia; stromatica
 a) Sporidia hyalina; paraph. nullae
 b) Sporidia brunnea; paraph. praes.
 c) Sporidia brunnea; paraph. nullae
 6. Sporidia filiformia; paraph. nullae
- CYCLODOTHIS Syd.
 SCIRRHIACHORA Th. et Syd.
 PYRENOBOTRYS Th. et Syd.
 CROTONE Th. et Syd.
 TERATOSPHAERIA Syd.
 SYNCARPELLA Th. et Syd.
 MONTAGNELLA Speg.
 HYALOCURREYA Th. et Syd.
 CURREYA Sacc.
 EPIBOTHRYS Th. et Syd.
 OPHIOCARPELLA Th. et Syd.

Trib. 2. Rosenscheldia

Loculi superficiales, stromate basali adnati v. stromate proprio praediti.

1. Loculi stromate basali cuticula innato-insidentes
 a) Loculi conferti; sporidia hyalodidyma; paraph. nullae
 b) Sporidia phaeodidyma; caeterum ut supra
 c) Stromata unilocularia perithecioides pediculi innata; sporidia hyalodidyma; paraph. nullae
 2. Loculi distincti stromate erumpenti elongato exserti; sporid. 4-loc., brunnea; paraph. praes.
 3. Stroma cylindraceo-erumpens, supra loculis ramoso-congregatis praeditum; sporidia phaeodidyma; paraph. nullae
- ROSENSCHELDIELLA Th. et Syd.
 LICOPOLIA Sacc. et Syd.
 MONOPUS Th. et Syd.
 ROSENSCHELDIA Sp.
 STALAGMITES Th. et Syd.

GENERA EXCLUDENDA V. DUBIA :

- Hyalodithis P. et Har. (onfr. Ann. Myc. 1914, p. 186)
 Scirrhia Speg. = Sphaeriaceae, *Botryosphaeria* proximum
 Curreyella Sacc. = Sphaeriales (Syn. Discostroma Clem.)
 Darwiniella Speg. = Sphaeriales (Curreyellae proximum)
 Diplothea Starb. = Myriangium sec. v. Höhn.
 Oxydothis Pen. et Sacc. = Sphaeriales (Syn. Merrilliipeltis P. Henn.)
 Kullhemia Karst. = Discomycetæ
 Plowrightiella Sacc. = ? (Syn. Pleodothis Clem.)
 Hypoxylonopsis P. Henn. = Valsaria
 Eurytheca de Seyn. = Myriangiaceae

- Gibellia Sacc. = Sphaeriales
 Rousssoella Sacc. = Didymosphaeria
 Montagnina v. Höhn. = ? Cucurbitariaceae
 Ophiodothis Sacc. = Hypocreac. p. p., typ. gen. = Balansia
 Loranthomyces v. Höhn. = Trichothyriaceae
 Myxodiscus v. Höhn.
 Roumegueria Sacc.
 Dichosporium Pat.
 Alboffia Speg. = ? Corynelia
 Pilgeriella P. Henn. = ? Perisporiaceae
 Monographos Fuck. = Sphaeriales
 Heterodothis Syd. = Lichen (Phylloporina)
 Mazzantia Mont. = Hyponectrieae († Apiosphaeria)
 Angatia Syd. = Myriangiaceae

Subf. 1. Dothideaceae

Sect. 1. Hyalosporae

AMERODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 295. — Stroma erumpens dothideoideum, loculis immersis; ascis aparaphysatis, octosporis hyalinis. — Typ. gen.:

1. *Amerodothis Illicis* (Cke.) Th. et Syd., l. c., *Bagnisiella Illicis* (Cke.) 5047 Sacc., Syll. II p. 590.
2. *Amerodothis Uncariae* Rac. in Th. et Syd., l. c., *Bagnisiella Uncariae* (Rac.) Sacc. et Tr., Syll. XXII p. 408.
3. *Amerodothis Juglandis* (Mont.) Th. et Syd., l. c., *Botryosphaeria Juglandis* (Mont.) Sacc., Syll. I p. 457.
4. *Amerodothis Molluginis* (v. Höhn.) Th. et Syd., l. c., *Bagnisiella Molluginis* (v. H.) Sacc. et Tr., Syll. XXII p. 408.

CATABOTRYS Th. et Syd., Ann. Mycol. 13., 1915, p. 297. — Stromata erumpentia, parenchymatica, inter singulos oculos subtus profunde incisa; loculis immersis. Asci aparaphysati octospori. Sporidia hyalina continua. — Typus generis:

1. *Catabotrys Palmarum* (Pat.) Th. et Syd., l. c., cum icon., *Bagnisiella Palmarum* Pat., Syll. IX p. 1005.

COCCOSTROMA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 269; 13., 1915, p. 271. — Stroma pulvinatum, superficiale, dothideoideum, centro affixum. Loculi immersi, rotundati, aequaliter distributi. Asci octospori, aparaphysati. Sporidia continua hyalina. Typ. gen.:

1. *Coccostroma Machaerii* (P. Henn.) Th. et Syd., l. c. = *Phyllachora* 5052
Machaerii P. Henn., Syll. XI. p. 369.
2. *Coccostroma Puttemansii* (P. Henn.) Th. et Syd., l. c. = *Auerswaldia* 5053
Puttemansii P. Henn., Syll., XVII p. 842.
3. *Coccostroma palmigenum* (Berk. et Curt.) Th. et Syd., l. c. = *Bo-* 5054
tryosphaeria palmigena, Syll. XIV p. 525.

Sect. 2. Phaeosporae

AUERSWALDIA Sacc. — Syll. II p. 626 et cfr. p. 461, IX p. 1031, XI p. 374, XIV p. 675, XVI p. 625, XVII p. 841, XXII p. 427.

1. *Auerswaldia Gigantochloae* Rehm, Ascomyc. Philipp V, Leaflets of 5055
Philipp. Botany, VI (1914) p. 2222. — Stromatibus innatis, orbicularibus dein striiformibus loculos 1-3, globosos, arcte adproximatos, 150 μ latos, papillulis minutis denum prominentes includentibus, per corticem stellatim vel rimose disrumptum conspicuis; hypostromate nigritulo sub cortice effuso; ascis clavatis, apice rotundatis, crasse tunicatis, 90 100 \times 20-30, paraphysibus filiformibus intermixtis; sporidiis distichis, oblongis, utrinque rotundatis, rectis, obscure fuscis, 25-30 \times 12-14.

Hab. in culmo *Gigantochloae* (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Hoc gen. spectant etiam *Dothidea-examinans* (M. et B.) Sacc., Syll. II p. 626, et *Bugnisiella oceanica* (Ces.) Sacc., Syll. II p. 590.

2. *Auerswaldia decipiens* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 5056
of Sci. VIII (1913) p. 395. — Stromatibus peridermio innatis, intus carbonaceis, primitus dispersis dein plus minusve confluentibus, hemiglobose prominentibus, atris, nitentibus, 1-2,5 mm. diam.; loculis 2-4 innatis, globulosis, 0,5 mm. diam., papillulis minimis conoideis prominentibus; ascis cylindræis, octosporis, 80-100 \times 12, paraphysibus septatis 3-4 μ cr. obvallatis; sporidiis oblique monostichis, ellipsoideis, continuis, rectis, fuscis, 12-14 \times 7-8.

Hab. in petiolis emortuis *Arengae* (Palmae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Ad *Phaeochora* von Höhn. pertinens; ab *A. Arengae* (Rac.) Sacc. et Syd. faciliè dignoscenda.

3. *Auerswaldia Pandani* Rehm, Ascomyc. Philipp. VI, Leaflets of Philip. 5057
Bot. VI (1914) p. 2273. — Stromatibus in epiphylllo haud decolorato gregariis, sessilibus, e basi discoidea hemisphaerico-conoideis, atris, nitidis, carbonaceis, loculos 2-4 includentibus, 0,5-2 mm. la-

tis, ostiolis papillulatis minimis superficiem stromatis subverrucosa reddentibus praeditis, demum circa loculos collabentibus, annulum latum nigrum formantibus; ascis evanidis; sporidiis ellipsoideis, rectis vel curvatis, continuis, fuscis, $15 \times 7-8$.

Hab. ad basim foliorum emortuorum *Pandani* (Pandanaeae), Mt. Banahao, ins. Philipp. (C. F. BAKER).

DOTHIDINA Theiss. et Syd., Ann. Mycol, 13., 1915, p. 302. — Stromata follicola. erumpenti-subsuperficialia, dothideoidea, loculis immersis. Asci paraphysati octospori. Sporidia brunnea simplicia.

1. *Dothidina felipponeana* Sacc., *Auerswaldia felipponeana* Sacc., Ann. Mycol. XIII (1915), p. 130. — Stromatibus laxè gregariis v. sparsis, epiphyllis, superficialibus globoso-pulvinatis, nigricantibus, e carnoso subcarbonaceis, $800-1000 \mu$ latis, supra convexo-applanatis, rimulosis, interdum 2-4 confluentibus; loculis pulpa stromatica, atra immersis, subglobosis, $160-170 \mu$ diam., ostiolis parum emergentibus, nitidulis, ascis tereti clavatis, deorsum sensim tenuatis, apice rotundatis, $190-200 \times 18-20$, octosporis, paraphysibus filiformibus, guttulatis $3-4 \mu$ cr. hyalinis obvallatis; sporidiis distichis oblongo-ellipsoideis, utrinque rotundatis, $19-24 \times 8-11$, e latere leniter depressis, fartis, subinde 2-guttatis, fuliginis.

Hab. ad folia languida v. emortua *Palmarum*, Montevideo, Paseo del Prado. — Verisimiliter affinis v. etiam synon. *Dothidinae palmicolae* (Speg.) (Doct. F. FELIPPONE).

Hoc gen. spectant etiam sec. Th. et Syd.: *Auerswaldia Leandrae* Syd., Syll. XVII p. 842, *A. Fiebrigii* P. Henn., Syll. XVII p. 842, *A. Hirtellae* P. Henn., Syll. XXII p. 428, *A. Miconiae* P. Henn., Syll. XVII p. 841, *A. disciformis* Wint., Syll. IX p. 1033, *A. palmicola* Speg., Syll. IX p. 1031.

AUERSWALDIELLA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 278; 13., 1915, p. 272. — Stromata superficialia, dothideoidea, pede centrali innata, hypostromate subcuticulari. Loculis rotundis immersis. Asci paraphysatis octosporis. Sporidiis continuis coloratis. Typ. gen.:

1. *Auerswaldiella puccinioides* (Speg.) Th. et Syd., l. c. = *Auerswaldia puccinioides* Speg., Syll. IX p. 1033 (Syn. *Dothidea viridispora* (Oke.) Berl. et Vogl., Syll. IX p. 1044, *Bagnisiella Pruni* P. Henn., Hedw. v. 48 (1908) p. 6: « Stromatibus amphigenis, innatè superficialibus, pulvinato-subglobosis, atris, granulato-rugulosis, 1-2 mm. diam.; loculis subglobosis, immersis, ostiolatis; ascis clavatis, vertice rotun-

dati, attenuato-stipitatis, octosporis, paraphysatis, 100-140 μ longis, p. sp. 60-70 \times 15-25; sporidiis subdistichis, oblongo-ellipsoideis, hyalinis, continuis, 16-18 \times 6-7.

Hab. in foliis *Pruni sphaerocarpace* (Rosaceae), Serra da Cantareira, S. Paulo, Brasilia.

BOTRYOCHORA Torrend, Broteria, Bot. v. XII, 1914, fasc. I p. 65.—

Stromata erumpentia, superficialia, turbinato-placentiformia, singula v. botryose aggregata, basi angustiore innata, atra; textura molliuscula, coriaceo-ceracea, crusta exteriori tenui atra, intus fumoso-brunneola hyalinescente, cellulis polygonis seriatim dispositis seriebus parallelis e basi ascendenti divergentibus. Loculis immersis dothideaceis strato simplici. Conidia continua brunnea. Asci paraphysati, octospori; sporidia continua brunnea.

1. **Botryochora nigra** (Torrend) Torr., l. c. p. 65 (Fungi sec. exs. 269), 5060

Megalonectria nigra, Bull. Jard. Bot. Bruxelles IV, 1., 1913, p. 8.—Stromata saepius ad basim stilboidea 1-1,5 mm. lata, applanato-turbinata, in sicco saepe umbilicato-collabescentia, superficie submammillosa v. girose plicata, atra. Loculis periphericis unistrato-sis, immersis, ellipticis, conidiferis majoribus, 350 \times 280, asciferis minoribus 160-200 \times 100-130; conidiis in sterigmatibus brevibus simplicibus hyalinis oriundis, parietalibus, in toto loculo, continuis, ellipticis, primum hyalinis, dein fuliginis, 20-24 \times 10-12, utrinque rotundatis; ascis clavatis, breviter pedicellatis parce paraphysatis octosporis, p. sp. 65-75 \times 16-18; sporidiis fusco-brunneis, continuis, ellipsoideis utrinque subaequantibus rima longitudinali 18-22 \times 8-10 monostichis v. subdistichis.

Hab. ad cortices arborum, Kisanu, Congo (VANDERYST), Zumbo Mozambique (A. CRUZ). — Status conidicus verisimiliter sistit *Stilbella cinerea* Torr.

Sect. 3. Hyalodidymae

PLOWRIGHTIA Sacc. — Syll. II p. 635, IX p. 1041, XI p. 376, XIV p. 680, XVI p. 628, XVII p. 845, XXII p. 429.

1. **Plowrightia Pelvetiae** Gonz. Fragoso, Mem. R. Soc. Españ. Hist. Nat. 5061

t. 11., 1919, 3., p. 110, fig. 2. — Stromatibus innatis, immersis, demum erumpentibus, atris, rugulosis, oblongis vel oblongo-elongatis vel irregularibus, 60-700 μ long., coriaceo-carbonaceis 1-3 plerumque 1-locularibus, loculis immersis, oblongo-conoideis (gen. *Zi-*

gnoellae in mentem revocantibus), loculis 70-140 μ in diam., ostiolo pertusis, proeminentibus; ascis clavatis, 36-52 \times 12-18, parietibus crassinusculis praeditis; apice rotundatis, breviter pedicellatis, paraphysibus numerosissimis, hyalinis, articulatis, filiformibus, flexuosis, simplicibus vel rarius ramosis, articulatis; sporidiis irregulariter distichis, subhyalinis, ovoideo-oblongis, 11-14 \times 5-7, 1-septatis, loculis inaequalibus, saepe 1-guttulatis vel granulosis sporidiis junioribus in mucro evolutis.

Hab. in frondibus *Pelvetiae canaliculatae* Dec. et Thur. (Algae), prope Ramallosa Lourido, Pontevedra, Hispania (Prof. BESCANSÀ). — Verisimiliter eadem est ac *Dothidella Pelvetiae* Sntb. quae anterior (de qua cnfr. s. l.)

2. **Plowrightia Mereschkowskyi** Vouaux, Bull. Soc. Myc. Fr. 1912, p. 194. — 5062

Stromatibus pulviniformibus immersis 2-3 mm. latis, e cellulis polygoniis 5-8 μ diam. efformatis; loculis irregulariter distributis 60-150 μ latis, primum clausis demum ostiolatis; ascis clavatis, breviter crasseque pedicellatis, apice rotundatis ibique tunica crassiori praeditis, 46-68 \times 14-15, octosporis; paraphysibus agglutinatis, indistinctis; sporidiis distichis, plus minus ellipsoideo-elongatis v. ovoideis, hyalinis, uniseptatis, non constrictis, saepe biguttulatis, loculo inferiori angustiori et breviori, 12-18 \times 5-6.

Hab. in thallo *Aspicilliae hispidae* Meresch. (Lichenes). Bogdo Astrakhan, Rossia (MERESCHKOWSKY).

3. **Plowrightia Puiggarii** Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. Nac. 5063

Cienc. Cordoba, t. 23., 1919, Extr. p. 131. — Maculae nullae: stromata hypophylla depresso-subglobosa parva 0,5-1 mm. diam. sparsa v. laxe gregaria, atra glabra laevia; loculi periphaerici numerosi obovati 100 \times 60; asci subobclavati breviter pedicellati, paraphysati, 70 \times 12; sporae octonae hyalinae oblique distichae, subfusoidae v. fusoidae-subclavulatae, ad septum medium leniter constrictae, loculis subaequilongis, supero obtusiusculo infero acutiusculo, 16-18 \times 4-5.

Hab. ad folia viva *Rubiaceae* frutescentis cujusdam, prope Apiaby, Brasilia (J. PUIGGARI).

PLEODOTHIS F. E. Clements, Genera of Fungi 1909, p. 49, 173. — 5064

Est *Plowrightia* polyspora. — Typus *P. polyspora* Bref., Syll. XI, p. 376. — Si hoc gen. validum, *Plowrightiella* (Sacc.) vocandum quia antea (Syll. I. c., ut Sectio).

MICROCYCLUS Sacc., Syll. XVII p. 844. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 276.

1. **Microcyclus Walsurae** Sydow, Ann. Mycol. XIII, 1915, p. 39. — Ma- 5065
culis nullis; stromatibus hypophyllis, singulis etiam epiphyllis, sparsis, solitariis vel binis trinis aggregatis, superficialibus, atris, 500-700 μ latis, 180-210 μ altis, opacis, rugulosis, pede brevi, centrali 90-150 μ crasso innato suffultis, e cellulis 8-10 μ longis prosenchymatice contextis; loculis immersis, ca. 10-20 μ quoque stromate, aequaliter dispositis, 80-110 μ diam., lenissime tantum prominulis; ascis brevissime stipitatis, 50-65 \times 13-17, octosporis, paraphysatis; sporidiis plerumque distichis, oblongis, hyalinis, utrinque rotundatis, medio 1-septatis, non constrictis, 18-22 \times 5-6, loculo supero plerumque parum latiore.

Hab. in foliis *Walsurae piscidia* (Meliaceae), *Peradeniya*, Ceylon (T. PETCH).

MICROCYCLELLA Theiss., Ann. Mycol. 12., 1914, p. 68; Theiss et Sydow, l. c. 13., 1915, p. 283. — Stromata superficialia, dothideoidea, lata basi sessilia, ex hypostromate intramatrici oriunda, coriaceo-carbonacea; loculis immersis rotundatis. Asci aparaphysati octospori. Sporidia hyalodidyma. — Typ. gen.:

1. **Mycrocyclella nervisequia** (v. Höhn.) Theiss., l. c. = *Polystomella nervisequia* v. Höhn., Syll. XXII p. 522. 5066

ULEODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 305. — Stromata erumpentia, dothideoidea, loculis immersis. Asci paraphysati octospori; sporidia hyalodidyma. — Typ. gen.:

1. **Uleodothis Balanseana** (S., R. et B.) Th. et Syd. l. c., *Plowrightia balanseana* Sacc., Roum. et Berl., Syll. IX p. 1041 (Syn. *Phyllachora Nyctaginearum* Speg., Syll. IX p. 1020, *Dothidella Adenocalymmatidis* P. Henn., Syll. XIV p. 677). 5067
2. **Uleodothis Rhynchosporae** (Rehm) Th. et Syd. l. c., p. 306 *Lizonia Rhynchosporae* Rehm, Syll. XVI p. 486 (*Plowrightia Rh.* v. Höhn.). 5068
3. **Uleodothis Pteridis** F. L. Stevens, Bot. Gazette 69., 1920, p. 248, 5069
tab. XIII fig. 6-7. — Maculis brunneis, aridis, 3-5 mm. diam.; stromatibus nigris ob perithecia rugosis, 1-2 mm. diam. in epiphylo majoribus, subepidermicis sed plus minus profunde innatis, superficie rugosis, non clypeatis epidermide lacerata tectis; hyphis stromaticis parallele distributis; loculis numerosis 100 μ circ. diam., globulosis; ascis numerosis cylindraceis tetrasporis, 65 \times 14; para-

physibus paucis inconspicuis, exilibus filamentosis; sporidiis hyalinis bilocularibus, oblongis, $17-20 \times 4-5$.

Hab. in frondibus *Pteridii caudati* (Filices), Maricao, Porto Rico. — Ob ascos tetrasporos praedistincta species?

ULEODOTHELLA Sydow, Ann. Mycol. 18., 1920, p. 184. — Ab *Uleodothide* differt sporidiis aequaliter septatis. — Typus gen.: *U. Aphanes* (Rehm sub *Polystomella*) Syd.

1. *Uleodothella Aphanes* (Rehm) Syd., l. c., *Polystomella Aphanes* Rehm, 5070 Syll. XVII p. 865. (*Uleodothis Aph.*, Th. et Syd. Ann. Mycol. 13., 1915, p. 306).

DOTHIDELLA Speg. — Syll. II p. 627, IX p. 1036, XI p. 375, XIV p. 676, XVI p. 626, XVII p. 846, XXII p. 432. — Syn. (sec. Th. et Syd., Ann. Mycol. 13., 1915, p. 307) *Plowrightia* Sacc.

1. *Dothidella Pelvetiae* Sutherland in Trans. Brit. Myc. Soc. V, pt. I, 5071 1914, p. 154 (1915). — Stromatibus sparsis, parvis, $210-650 \mu$ diam., convexis, initio immersis, tandem in summa parte, atris; loculis immersis, subglobosis vel complanatis, $100-120 \mu$ latis, $80-90 \mu$ altis; ascis cylindraceis vel clavatis, octosporis, paraphysatis, $40-45 \times 12-15$; sporidiis distichis, ovoideis vel oblongis, hyalinis, 1-septatis, vix constrictis, episporio crasso, $12,5-15 \times 5-6$.

Hab. in thallo *Pelvetiae canaliculatae* (Algae), Orkney, Scotia. — Cnfr. *Plowrightia Pelvetiae* p. 544.

2. *Dothidella Canarii* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 5072 of Sci. VIII (1913) p. 398. — Stromatibus in maculis flavidulis folio innatis, in utraque pagina conspicuis, sparsis, orbicularibus, planis, atris, ca. 3 cm. latis, verruculosi, loculis plurimis globosis; ascis clavatis, octosporis, 80×10 ; sporidiis distichis, fusiformibus, utrinque acutatis, medio septatis, non constrictis, hyalinis, $12-15 \times 3-4$.

Hab. in foliis *Canarii villosi* (Burseraceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — Verisimiliter eadem est ac *Phyllachora Canarii* P. Henn. (cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 517).

3. *Dothidella vacciniicola* Dearness et House, N. Y. St. Mus. Bull. n. 188, 5073 p. 43 (1916). — Stromatibus nodulosis, subglobosis, basi 1-2 mm. diam., 1-2 mm. altis, obscure brunneis, corticem penetrantibus, demum cavis, subcarbonaceis; loculis periphaericis, plerumque stratum simplicem efformantibus, in quoque mm. 6 v. 7, ostiolis puncti-

formibus 120-150 μ latis 150 μ altis; ascis e linearibus subclavatis, apicibus subconiventibus, 75-90 \times 6-7, paraphysibus linearibus 90-100 μ ; sporidiis hyalinis, submonostichis, parum conglobatis, uniseptatis, 10-12 \times 5-6.

Hab. parasitice in ramis vivis *Vaccinii atrococci* (Ericaceae), Biltmore, N. C., Amer. bor. (H. D. HOUSE).

4. *Dothidella portoricensis* F. L. Stevens. Bot. Gazette 69., 1920, p. 249, 5074 fig. 1, tab. XIII fig. 8-9. — Maculis linearibus amphigenis definitis 0,5-1 \times 3-4 mm.; stromatibus linearibus ex epidermidē parum elevatis (circ. 70 μ); loculis plerumque 5-seriatis, subglobosis 70 μ circ. diam.; paraphysibus nullis; ascis numerosis cylindricis, octosporis, 54 \times 10; sporidiis e hyalinis dilute fumosis, uniseptatis, 17 \times 3,5.

Hab. in foliis *Gleicheniae* sp. (Filices), Las Marias, Porto Rico. — A *D. pteridophila* Speg. characteribus stromaticis diversa.

5. *Dothidella Gigantochloae* (Rehm) Theiss. et Sydow, Ann. Mycol. 13., 5075 1915, p. 320, *Scirrha Gigantochloae* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Bot. VI (1914) p. 2223. — Stromatibus in epiphyllō late subcinereo gregarie innatis, parallele striiformibus, oblongis, utrinque obtusis, rectis, 0,3-1 mm. long. 0,3-0,5 mm. latis, erumpentibus, nigris; loculis 100 μ latis, seriatis, minutissime ostiolatis; ascis clavatis, filiformi-paraphysatis, 60-65 \times 14, in stipitem elongatis; sporidiis distichis, ellipsoideis, utrinque subacutatis, medio septatis, non constrictis, hyalinis, 12-15 \times 6.

Hab. in foliis *Gigantochloae Scribnerianae* (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

6. *Dothidella flava* F. L. Stevens, Bot. Gazette, 69., 1920, p. 250 fig. 5076 2-3. — Stromate e pallido flavo juventute rotundato senio lineari, 1,6 mm. longo 0,27 mm. lato, subepidermico, late erumpenti et elevato; loculis globulosis 60-70 μ diam. 1-v. 2 seriatis; ascis linearibus octosporis, 34-51 \times 6; sporidiis hyalinis, bilocularibus, oblongis, 14 \times 3,5. — Conidiis filiformibus 40 \times 1,5 hyalinis uno cum stromate in acervulos v. in pycnidios efformatis.

Hab. in foliis *Lithachnes pauciflorae* (Graminaceae), Prujillo Alto, Mayaguez, Florida Adentro, in Porto Rico. — Color stromatum peculiaris et tunc fungus fere hypocreaceus, ceterum dothideaceus.

7. *Dothidella? pakuri* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII (1912) p. 94. — Maculis epiphyllis, minutis, de-

terminatis, 1-3 mm diam., centro pallescentibus, ambitu fuscidulis; stromatibus hypophyllis, sparsis, epidermide laciniatim disrupta cinctis, suborbicularibus, parvis, 1-3 mm. diam., superne planis, non vel vix colliculosis, extus fuscis intus atris; contextu grosse parenchymatico, olivaceo, aegre perspicuo; loculis monostichis, subglobosis, minusculis, 50-60 μ diam., ostiis latissimis, 25-30 μ diam., apertis, vix prominulis; ascis fusoideis, apice crassissime tunicatis, breviter crasseque pedicellatis, 50 \times 10, apophysatis, per aetatem subdiffluentibus; sporidiis saepius distichis, elliptico-subclavulatis, utrinque obtusiusculis, medio 1-septatis, non vel lenissime constrictis, loculo supero saepe nonnihil crassiore, 4-guttulatis vel non, rarius 4-blastis, hyalinis, 14-18 \times 4-6, primo muco obvolutis.

Hab. in foliis vivis *Rheediae brasiliensis* (Guttiferae), prope Puerto Leon, Misiones, Argentina.

Sect. 4. *Phaeodidymae*

DOTHIDEA Fr. — Syll. II p. 639, IX p. 1043, XI p. 377, XIV p. 680; XVI p. 628, XVII p. 852, XXII p. 435. — Cnfr. Theissen et Sydow, Ann. Mycol. 13., 1915, p. 328.

1. *Dothidea tetraspora* B. et Br. — Syll. II p. 640 — var. *citricola* Sacc., 5078 Philipp. Journ. of Sc. Manila, P. I., v. 18., 1921, p. 600. — Sporidiis quam typo paullo brevioribus, 16 \times 7, rufo-fuliginis, articulis subaequalibus; ascis 70 \times 11-12.

Hab. in trunco emortuo *Citri trifoliatae* Fukien, Foochow, Cina (SKVORTZOW). — Species verisimiliter collecticia de qua cnfr. Theiss. et Sydow, Ann. Myc. 13., 1915, p. 336.

2. *Dothidea Edgeworthiae* H. et P. Sydow et Hara, in Sydow Ann. Mycol. XI, 1913, p. 267. — Stromatibus erumpentibus, sparsis v. aggregatis, minutissimis, 200-350 μ diam., atris, superficie leniter rugulosis; loculis paucis, 1-5 in quoque stromate; ascis cylindraceis, apicē obtusis, deorsum in stipitem longum attenuatis, p. sp. 45-60 \times 12-16, octosporis; paraphysibus numerosissimis ascos superantibus; sporidiis distichis, ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, fusco-brunneis, 13-16 \times 6, 5-7, 5.

Hab. in ramis siccis *Edgeworthiae* Gardneri, Kawaye-mura prov. Mino, Japoniae (K. HARA). — Species ulterius inquirenda habitus *Eriksoniae* sed fabrica peritheciarum a Dothideaceis potius excludenda. Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 340, cum icon.

SYSTREMMMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 330. — Stroma erumpens, dothideoideum, loculis immersis, ascis aparaphysatis octosporis. Sporidia phaeodidyma. — Typ. gen. :

1. **Systemmma natans** (Tode) Theiss. et Syd., l. c., *Sphaeria natans* Tode 5080
1791 (Syn. *Dothidea Sambuci* Fr., Syll. II p. 639). — var. **Viburni**
Jaap, Verh. Bot. Ver. Prov. Brandenb. 57. (1915) p. 12. — A typo
differt sporidiis magis scabris et matrice aliena.

Hab. in ramis exsiccatis **Viburni Lantanae** (Caprifoliaceae), in monte S. Salvatore pr. Lugano, Helvetia.

2. **Systemmma placenta** Theiss. et Syd. nom. nov., l. c. p. 334 = *Do-* 508
thidea bullata Berk. nec Fries (*Plowrightia bullata*, Syll. II p. 637).
Ad gen. *Systemmma*, species complures adscriptae sunt quae in Theiss.
et Sydow citantur.

ACHORELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 340. — Stromata erumpentia, dothideoidea loculis immersis. Asci paraphysati octospori. Sporidia phaeodidyma. — Typ. gen. :

1. **Achorella ametableta** (Rehm) Th. et Syd., l. c., *Dothidella ametableta* 5082
Rehm, Syll. XIV p. 677.
2. **Achorella Gastrolobii** (P. Henn.) Th. et Syd. l. c., *Lizoniella Gastro-* 5083
lobii Sacc., Syll. XVII p. 661.
3. **Achorella Centrolobii** (P. Henn.) Th. et Syd., l. c., *Dothidea Centro-* 5084
lobii P. Henn., Syll. XVII p. 853.
4. **Achorella juruana** (P. Henn.) Th. et Syd., l. c., *Dothidea juruana* 5085
P. Henn., Syll. XVII p. 854.

TRICHODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 177 ; 13., 1915, p. 268. — Stromata superficialia, centro innata, contextu dothideaceo brunneo, loculis immersis periphaericis, media sterilia, ad marginem superiorem hyphis radiantibus liberis coronata. Asci cylindraceo-ventricosi, paraphysati. Sporidia octona, didyma, fusca. Typ. gen. :

1. **Trichodothis comata** (Berk. et Rav.) Th. et Syd., l. c. = *Asterina co-* 5086
mata Berk. et Rav., Syll. I p. 49.

PERISCHIZON Syd., Ann. Mycol. 12., 1914, p. 265 ; 13., 1915, p. 269. — Stromata superficialia, dothideoidea, pede centrali innata, glabra, medio sterilia, loculis periphaerice in annulum confluentibus ; ascis paraphysatis octosporis ; sporidiis phaeodidymis. — Differt a *Trichodothide* loculis in annulum confluentibus. — Typ. gen. :

1. *Perischizon oleifolium* (Kalch. et Oke.) Syd., l. c. = *Dothidea olei-* 5087
folia Kalch. et Cooke, Syll. II p. 642.

COCCODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 271; 13., 1915, p. 279. — Stromata pulvinata, centro affixa, contextu cellulo brunneo. Loculi immersi stipati. Asci paraphysati octospori. Sporidia phaeodidyma. — Typ. gen.:

1. *Coccodothis sphaeroidea* (Cooke) Theiss. et Syd., l. c. = *Dothidea* 5088
sphaeroidea Oke., Syll. II p. 642.
2. *Coccodothis euglypta* (Mont.) Th. et Syd., l. c. = *Phyllachora eu-* 5089
glypta (Mont.) Sacc., Syll. II p. 600.

COCCODOTHELLA Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 280. — Est *Coccodothis* paraphysibus destitutum. — Typ. gen.:

1. *CoccodotHELLa placida* (Syd.) Syd., l. c. = *Plowrightia placida* Syd., 5090
Syll. XXII p. 430.

LEVEILLELLA Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 284. — Stromata superficialia, dothideoidea, carbonacea, lata basi sessilia, ex hypostromate intramatrici per stomata erumpente oriunda, mycelio superficiali ramoso septato absque hyphopodiis. Loculis immersis lenticularibus. Ascis paraphysatis octosporis. Sporidia phaeodidyma. Typ. gen.:

1. *Leveillella Drimydis* (Lév.) Theiss. et Syd., l. c. = *Lembosia Drimydis* 5091
Lév., Syll. II p. 743 (Syn. *Asterina compacta* Lév., Syll. I p. 51).

ENGLERODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 285. — Stromata superficialia, dothideoidea, lata basi sessilia, mycelio superficiali libero nullo. Loculis immersis globulosis. Ascis paraphysatis octosporis. Sporidiis phaeodidymis. — Typ. gen.:

1. *Englerodothis kilimandscharica* (P. Henn.) Theiss. et Syd., l. c. = *Coc-* 5092
conia kilimandscharica P. Henn., Syll. XIV p. 815.

LEVEILLINA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 286. — Stromata superficialia, dothideoidea, lata basi sessilia, ex hypostromate epidermali et subepidermali per stomata erumpenti oriunda, absque mycelio superficiali libero. Loculis immersis globulosis. Ascis paraphysatis octosporis. Sporidiis phaeodidymis. — Typ. gen.:

1. *Leveillina Arduinae* (K. et C.) Theiss. et Syd., l. c. = *Dothidea Ar-* 5093
duinae Kalch. et Oke., Syll. II p. 642.

2. *Leveillina endocrypta* (Mont.) Th. et Syd., l. c. — *Dothidella endocrypta* (Mont.) Berl. et Vogl., Syll. IX p. 1037. 5094

Sect. 5. Hyalophragmiae

YOSHINAGELLA v. Höhn. in Sitzungsab. Akad. Wiss. Wien CXXII, 1, p. 293 (1913). — Etym. a T. YOSHINAGA. — Stromata epidermidi laxè adnata, plana, centro tantum incrassata, carbonaceo-cornea, in parte mediana sterilia. Loculi in circulo marginali dispositi. Asci octospori paraphysati. Sporidia hyalina pluriseptata. Hypostroma in epidermide evolutum. — Cnfr. Theissen et Sydow, Ann. Mycol. XIII, 1915, p. 265.

1. *Yoshinagella japonica* v. Höhn., loc. cit. — Stromatibus epiphyllis, 5096 sparsis, applanatis, 1-2,5 mm. latis, irregulariter rotundatis, margine parum lobulato, verrucis nitidulis in series 2-3 fere concentricas dispositis asperatis, atris, subcorneis sed fissilibus, inferne planis et epidermidi adhaerentibus, hypostroma centrale in epidermide penetrante praebentibus, contextu parenchymatico grosse-celluloso, in medio 300-350 μ crasso, in margine lato tantum 200-250 μ attingente; loculis in circulo dispositis, 160-200 μ , ostiolo non papillato pertusis; ascis cylindraceis, superne rotundatis, 110 \approx 10, basi in pedicellum 30 \approx 4-5 attenuatis, paraphysibus filiformibus, 1 μ cr., copiosis obvallatis; sporidiis monostichis, oblongo-subfusoides, rectis vel parum curvatis, utrinque obtusulis vel acutiusculis, hyalinis, 18-24 \approx 5-6, 4-cellularibus, ut videtur, sed immaturis.

Hab. in foliis *Quercus glaucae*, in Japonia (YOSHINAGA).

ELMEROCCUM Theiss. et Syd., Ann. Mycol. 13., 1915, p. 282. — Stromata superficialia, dothideoidea, pede centrali innata. Loculi immersi rotundati aequaliter sparsi. Asci paraphysati octospori. Sporidia 4-locularia, hyalino-chlorina.

1. *Elmerococcum orbicula* (Syd.) Sydow, l. c., *Darwiniella orbicula* Syd., 5096 Leaf. of Philipp. Bot. v. 4., 1911, art. 62 p. 1158. — Stromatibus hypophyllis, sparsis, per epidermidem erumpentibus et subsuperficialibus, orbicularibus, pulvinatis, applanato-globosis, atris, 0.33-1 mm. diam., intus pallidioribus; loculis numerosissimis, omnino immersis, 110-175 μ diam., ascis clavatis, apice rotundatis, breviter pedicellatis, 50-70 μ longis, 14-76 μ latis, octosporis; sporidiis distichis, cylindraceo-fusoides, leniter inaequilateris, utrinque acutis, 3-septatis haud constrictis, hyalino-chlorinis, 25-32 μ longis, 4-5 μ

latis; paraphysibus ascos superantibus, filiformibus, 1,5 cr.

Hab. in foliis vivis *Cryptocarya todayensis* (Lauraceae), Todaya Ms. Apo, Distr. Davao ins. Mindanao in Philippin. (ELMER).

METAMERIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 342. — Stromata erumpentia, dothideoidea, linearia, loculis immersis; asci paraphysati octospori; sporidia hyalina biseptata. — Typ. gen.:

1. *Metameris japonica* (Syd.) Syd. in l. c., *Monographus japonicus* Sydow, Ann. Mycol. 10., 1912, p. 408. — Stromatibus gregariis, parallelis, sub epidermide formatis, linearibus v. lanceolatis $\frac{3}{4}$ -1 mm. long., circiter 0,1 mm. latis non v. vix confluentibus, atris, epidermide medio longitudinaliter fissa cinctis; loculis ca. 8-16 in quoque stromate, conidiis, uni-vel biserialiter dispositis, globulosis, ostioliis distinctis papillulatis erumpentibus, 100-150 μ long. 80-120 μ latis; ascis cylindraceis, sessilibus, 40-70 \times 7-9, octosporis; sporidiis distichis v. subdistichis, oblongo-cylindraceis, utrinque obtusis, primitus 1-, dein cellula superiore saepe iterum 1-septatis, hinc 2-septatis, non v. vix constrictis, rectis v. subrectis, hyalinis, 10-14 \times 3-4, loculis inaequalibus, loculo medio plerumque leniter crassiore.

Hab. in stipitibus *Osmunda regalis* var. *japonicae* (Filices), prov. Mino Kawaye-mura, Japonia (K. HARA). — *Mon. microsporo* Niessl proximus.

PHRAGMODOTHELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 343. —

Stroma erumpens, dothideoideum, loculis immersis. Asci paraphysati, octospori. Sporidia hyalina, triseptata. — Typ. gen.:

1. *Phragmodothella Kelseyi* (Ell. et Ev.) Th. et Syd., l. c., *Homostegia Kelseyi* Ell. et Ev., Syll. IX p. 1050.
2. *Phragmodothella globulosa* (C. et M.) Th. et Syd., l. c., *Darwiniella globulosa* (E. et M.) Sacc., Syll. IX p. 1049.

Sect. 6. Phaeophragmiae

PHRAGMODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 178; 13., 1915, p. 344. — Stroma erumpens, dothideoideum, loculis immersis. Asci paraphysati, octospori. Sporidia brunnea triseptata.

1. *Phragmodothis asperata* (Sydow) Syd., Ann. Mycol. 13., 1915, p. 345. *Montagnella asperata* Syd., Ann. Mycol. X, 1912, p. 442. — Stromatibus sparsis v. aggregatis, erumpenti-superficialibus, subglobosis

v. *hemisphaerico-globosis*, 1,5-3 mm. diam., pulvinatis, atris, ob loculos prominulos granulosis, contextu distincto e cellulis 15-19 μ long. composito; loculis monostichis, in parte superiore stromatum sitis ad tertium usque prominulis, ovato-subconicis, 150-200 μ diam., nucleo albo faretis; ascis clavatis, saccatis v. clavato-cylindraceutis, sursum attenuatis, sed ad apicem rotundatis et crasse tunicatis, 140-200 \times 16-32, 6-8-sporis; sporidiis oblique monostichis, distichis v. in asci parte inferiore saepe etiam tristichis, subfusoides, utrinque leniter attenuatis, sed apicibus rotundatis, primo hyalinis, tandem opace brunneis, 4-septatis, ad septum medium plerumque valde constrictis, 26-52 \times 9-11, verrucis distinctis dense asperatis; paraphysibus nullis v. indistinctis.

Hab. ad corticem *Euphorbiae* sp. (Euphorbiaceae), Wagenpadsnek distr. Pretoria, Transvaalia, Africa austr. (P. J. PIENACER).

DOTHIDEOSELLA v. Höhn. — Ubi?

1. *Dothideopsella salicella* v. Höhn., Ann. Mycol. 18., 1920, p. 80. — 5101

Stromatibus e cortice erumpentibus, gregariis, plerumque lineariter dispositis, elongatis v. rotundatis, uni-v. plurilocularibus, 360-500 μ long., 250 μ circ. altis; loculis rotundatis, 180-200 μ latis, 160 μ altis, apice depresso ostiolatis, ostiolo 30 μ lato. Stromate extus parenchymatico e cellulis 80-10 μ cr., intus 8-12 μ efformato; paraphysibus praesentibus; ascis numerosis, cylindraceuto-clavatis, circ. 84 \times 7, octosporis; sporis in asco brunneolis, singulis subhyalinis, fusoides, apice obtusulis, plurilocularibus, 19-23 \times 3-3,5; loculo superiori secundo parum latiori.

Hab. in ramulis *Salicis* sp. (Salicaceae), Tullnerbach Wienerwalde, Austriae (v. HÖHNEL).

Sect. 7. Phaeodictyae

DICTYODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 346. — Stromata erumpens, dothideoideum, loculis immersis. Asci aparaphysati octospori. Sporidia brunnea muralia. — Typ. gen.:

1. *Dictyodothis Berberidis* (Rehm) Theiss. et Syd., l. c., *Curreya Berberidis* Rehm, Syll. XVI p. 632. 5102
2. *Dictyodothis excavata* (Cke et Ell.) Th. et Syd., l. c., *Curreya excavata* (Cke et Ell.) Sacc., Syll. II p. 652. 5103

Sect. 8. **Scolecosporae**

TRICHOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 289. — Stromata superficialia, dothideoidea, lata basi sessilia, hypostromate sparso subcuticulari v. epidermali, hypothecio et interiore laetico-lore molliusculo tenaci. Loculis rotundis immersis sparsis. Ascis paraphysatis octosporis. Sporidiis filiformibus, hyalinis, articulatis.

1. **Trichochora marginata** (Theiss.) Th. et Syd., l. c., *Ophiodotis marginata* Theiss., Ann. Mycol. X, 1912, p. 10, cum icon. — Theissen, Decad. Fl. Bras. n. 249. — Amphigena, in hypophyllo fortius evoluta et confluentis; stromate dimidiato (subtus non evoluto), superficiale, maculas irregulares sistenti, scruposo-colliculoso, extus brunneo v. atro margine griseo-cincto, intus in sectione rubro brunneo, fere carbonaceo, ex hyphis dense intertextis, ca. 300 μ cr., crusta pseudoepidermali ca. 35 μ crassa, pluriloculare; peritheciis sparsis v. contiguis, globosis, parietibus propriis indistinctis ex hyphis densius intricatis, collo perbrevis crustam epidermalem perforantibus ca. 170 μ diam.; ascis clavato-cylindricis, breviter pedicellatis, 75-100 \times 8-9, p. sp. 65-75 μ longis, apice rotundatis, crassiuscule tunicatis; sporis filiformibus, parallelis, septatis, hyalinis (fasciculatis flavo-viridulis) longitudine ascorum p. sp.

Hab. ad folia fruticis ejusdam, Sao Leopoldo Rio Grande do Sul, Brasilia (RICK).

CASTAGNELLA Arnaud, in Bull. Soc. Mycol. Fr. 1914, p. 357 (Etym. a cl. mycologo gallico CASTAGNE). — Parasitica in Ascomycetibus. Stroma (proprium pro parte) subplanum vel hemisphaericum, coriaceo-carbonaceum, nigrum, intus fuscum. Loculis immersis ostiolo minuto papillato. Ascis elongato-clavatis, paraphysatis, octosporis. Sporidiis fusoido-falcatis, septatis, hyalinis.

1. **Castagnella coccifera** Arnaud, l. c. p. 358, t. XIX. — *Charact. gen.* 5105 Loculis 250-300 μ diam.; ascis 120 \times 11, sporidiis 1-septatis, 50-55 \times 3-4. — Pycnidii globoso-piriformibus 170 μ diam.; sporulis fusoido-falcatis, 1-septatis, hyalinis, 45-50 \times 3-3,5.

Hab. parasiticum in *Henriquesia cocciferae*, Montpellier, Gallia merid.

Subfam. 2. Phyllachoreae

Sect. 1. Hyalosporae

HALSTEDIA F. L. Stevens, Bot. Gazette 69., 1920, p. 253. — Stroma superficiale non radiatum loculigerum. Asci octospori; sporidia hyalina v. subhyalina continua.

1. **Halstedia portoricensis** F. L. Stevens, l. c., tab. XIV fig. 18-19. — 5106
Stromatibus amphigenis sed in epiphyllis copiosioribus, atris, depressis, 1-4 mm. diam., superficie demum corrugata v. centro quandoque elevata, superficialibus non radiatis; loculis usque 400 μ latis, 160 μ altis; ascis octosporis cylindraceis, 68-85 \times 14; sporidiis ovoideis, continuis, hyalinis v. pallide stramineis, 17 \times 10.

Hab. in foliis *Sideroxylonis foetidissimi* (Sapotaceae), Quebradillos, Porto Rico.

TRABUTIA Sacc. — Syll. I p. 449, IX p. 601, XI p. 293, XVI p. 463, XVII p. 587, XXII p. 90 (ubique inter Sphaeriaceas).

1. **Trabutia Lonicerae** Rac. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 356. — 5107
Stromatibus epiphyllis atro-piceis, prominentibus, e rotundo subangulosis, 1 mm. latis, 280 μ altis, basi planis, ostioliis peritheciarum 5-8, minutis, non extantibus signatis, subcuticularibus, parietibus homogeneis, contextu e cellulis verticalibus conflato; loculis globosis v. ovoideis v. globoso-depressis, 130-200 μ diam.; ascis tereti-clavatis apice rotundatis, deorsum sensim tenuatis, 110-130 \times 16-20, paraphysibus filiformi-clavatis obvallatis, 8-sporis, sporidiis continuis, hyalinis, levibus, anguste ovoideis, utrinque lan- ceolato-acutatis, rectis, 20-24 \times 4-5.

Hab. in foliis *Lonicerae javanicae* (Caprifoliaceae), M. Pangerango, 3025 m. alt., Java (RACIBORSKI).

2. **Trabutia Conzattiana** Sacc., Ann. Mycol. 10., 1912, p. 310. — Theiss. 5108
et Syd., Ann. Mycol. 13., 1915, p. 356, tab. III, fig. 19. — Maculis stromaticis epiphyllis, crebris, ex orbiculari angulosis, 2-3 mm. diam. brunneis, hypostromate tegente atro-brunneo submembranaceo margine eroso; peritheciis paucis, hypostromati adnatis, globoso-hemisphaericis, nitide nigricantibus, 170-190, rarius usque ad 300 μ diam., obtuse papillato-ostiolatis, contextu pachydermatico, atro, distincte pseudoparenchymatico; ascis breviter crasseque oblongo-fusoideis, sessilibus, utrinque tenuatis sed summo apice truncatis,

65-70 \times 26-28, paraphysibus filiformibus saepe tortuosis, initio mucoso-coalitis obvallatis, 6-8-sporis, saepius 6-sporis; sporidiis oblongo-fusoides, subtristichis, 30 \times 9-10, inaequilateris, utrinque abrupte acuminatis, fulvo-flavidis intus minutissime granulosis, apicibus subhyalinis.

Hab. in foliis languidis *Quercus* sp. (Cupuliferae), Oaxaca Mexici (CASSIANUS CONZATTI e Oivezzano tridentino, horti botanici Oaxacensis director. Comm. Doct. S. BONANSEA). — A *Trabutia quercina* mox dignoscitur ascis crassioribus et brevioribus (non 100 \times 18) sporidiis utrinque vere acutis, fulvo-lutescentibus, intus minutissime granulosis apicibus achrois.

3. *Trabutia Conocephali* Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, 5109 p. 350. — Epiphylla, sparsa, nigro-picea, subrotundo-subangulosa, 2-6 mm. lata, convexo-applanata, 0,5 mm. alta, subcuticularis, contextu stromatis e cellulis verticalibus, nigricantibus, angustis conflato, loculis subglobosis, v. depresso-globosis, 0,5 mm. diam.; ascis paraphysatis, apice rotundatis, deorsum tennatis, 8-sporis, 80 \times 15; sporidiis ovoideis, levibus, monostichis, 12-14 \times 7, continuis, hyalinis.

Hab. in foliis *Conocephali suaveolentis* (Moraceae), pr. Tjibodas in M. Gedah Javae, frequens (RACIBORSKI).

4. *Trabutia Elmeri* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 353. — 5110 Stromatibus tantum epiphyllis in maculis decoloratis parum distinctis insidentibus, irregulariter sparsis, non v. vix greges efformantibus, 1-2 mm. diam. confluyendo usque 6 mm. diam., ambitu rotundatis v. irregularibus, omnino subcuticularibus, superficie nigris undulatis; loculis depresso globosis v. lenticularibus 350-500 μ latis 150-220 μ altis; pariete basali nulla; ascis paraphysatis, clavatis, 75-90 \times 14-16, octosporis, sporidiis monostichis v. distichis, oblongis, utrinque rotundatis, unilocularibus hyalinis 14-17 \times 6,5-8. — Loculis conidiferis depressis; conidiis subfalcato-incurvatis, unilocularibus hyalinis, angustissimis, 14 17 \times 0,75.

Hab. in foliis *Fici banahaensis* (Moraceae), Todaya M. Apo, Mindanao, Ins. Philipp. (ELMER).

5. *Trabutia benguetensis* H. S. Yates, Philipp. Journ. Sc. XII (1917), 5111 p. 374. — Stromatibus hypophyllis, irregulariter dispersis, 1 mm. diam., vel congregatis, 3-6 mm. diam., rotundatis, atris; loculis applanatis, 450-500 μ diam., 60-70 μ altis; stroma opaco 30-35 μ crasso, interiore, ex hyphis obscure brunneis 3-4 μ crassis formato; ascis oblongo-ovatis 40 \times 15, octosporis, paraphysatis; sporidiis distichis,

subglobosis, 1-cellularibus, hyalinis, $6 \approx 5$.

Hab. in foliis *Fici benguetensis* (Moraceae), Benguet Luzon, Ins. Philipp. — Imprimis sporidiis minutis a congeneribus fœicolis distinguitur.

6. *Trabutia vernicosa* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 353. — 5112
Stromatibus epiphyllis, dense sparsis, saepius 2-4 mm. diam., raro 1 mm., alte convexis, atro-nitentibus, ambitu circulari, subcuticularibus; contextu ex hyphis parallelis, rufo-brunneis, 8-10 μ cr., prosenchymaticis conflato; loculis depresso-globosis, 200-350 \approx 150-200; clypeo solido, opaco 40-55 μ cr.; ascis clavatis, typice paraphysatis, 45-55 \approx 12-16, octosporis; sporidiis monostichis v. distichis, ovato-ellipsoideis, hyalinis, continuis, 10-12 \approx 7-9.

Hab. in foliis *Fici heterophyllae* (Moraceae), Mindoro, ins. Philipp. (E. D. MERRILL).

7. *Trabutia nervisequens* (Lingelsh.) Theiss. et Syd., Ann. Mycol. 13., 5113
1915, p. 353, *Phyllachora Schweinfurthii* P. Henn. var. *nervisequens* Lingelsh., Engl. Bot. Jahrb. 39., 1907, p. 604. — Stromatibus epiphyllis in maculis decoloratis vix perspicuis ad nervos tantum evolutis insidentibus, plus minus elongatis confluentibusque, 1-2 cm. long., nitidis, subcuticularibus; loculis paucis v. numerosis, depressis, variabilibus, intus ex hyphis subparallelis 7-9 μ cr. prosenchymatice efformatis, 400-600 μ latis, 250-300 μ altis; clypeo 40-60 μ crasso, opaco; ascis cylindræis, pedunculatis, paraphysatis, 75-110 \approx 11-14; sporidiis plerumque monostichis, late ellipsoideis, hyalinis, unilocularibus, 12-16 \approx 8-10.

Hab. in foliis *Fici Hochstetteri* var. *glabrior* (Moraceae), Godaburka Abyssinia, Africa (F. ROSEN).

8. *Trabutia Fici-Dekdekenae* Bacc., F. Etiopici n. 86, in Ann. di Botan. 5114
XIV, 1917, p. 135. — Stromatibus epiphyllis in maculas amplas lobatas vel irregulariter reticulato-rugulosas, planas vel depresso-pulvinatas ac atras secus nervos lineariter productas, loculis conicis 450 μ latis 234 altis, intus albo-farctis, atris contiguis vel saepius sparsis, ascis octosporis cylindrico-clavatis, brevissime pedunculatis, 64 \approx 11, paraphysatis, sporis ellipticis hyalinis granulatis 12-15 \approx 9,6 distichis.

Hab. in foliis *Fici Dekdekenae* (Moraceae), secus flum. Haddas, Assaorta, Erythraea, Africa (PAPPI). — *Tr. nervisequens* valde affinis.

9. *Trabutia Fici-Hochstetteri* Bacc., F. Etiopici n. 87, in Ann. di Botan. 5115
XIV, 1917, p. 135. — Saccardo, Notae Mycol. XXII, 1917, p. 189,

n. 160. — *Amphigena* sed praesertim epiphylla: stromatibus subcuticularibus hypophyllis minutis, sparsis vel gregariis ad 2 mm. latis, saepe in maculas irregulariter reticulatas confluentibus; stromatibus epiphyllis late crustosis ambitu irregulariter lobato, secus nervos saepe productis; impresso-punctatis multilocularibus, loculis crebris 450 μ latis 350 μ altis, ostiolo minuto perforatis; ascis clavatis 110-120 \times 16, paraphysatis; sporidiis hyalinis ellipsoideis monostichis 14 \times 8.

Hab. in foliis *Fici Hochstetteri* (Moraceae), Decamaré, Accélé Guzai, *Erythraea* (BALDRATI). — *Sec.* Saccardo l. c., ascis 85-95 \times 7,5-9 v. usque 14 μ , sporidiis 11,5-13 \times 8.

10. ***Trabutia Sycomori*** Baccarini, *Eumyc. Somalia* it., in « Missione Stefanini-Paoli » Firenze 1916, p. 196. — Stromatibus amphigenis minutis 1-2 locularibus, tunc sparsis, tunc in greges parvos subrotundos 2-4 cm. diam. appropinquatis, rarius confluentibus; loculis 470 μ latis, 200-300 μ altis minute papillosis, ascis clavatis breviter pedicellatis octosporis paraphysatis 80 \times 12-18; sporis, ellipsoideis vel rotundis 9 \times 12, monostichis vel interdum distichis.

Hab. in foliis *Fici Sycomori* (Moraceae), Afgoi Somalia it., Africa trop. (PAOLI).

11. ***Trabutia Evansii*** Theiss. et Syd., *Ann. Mycol.* 13., 1915, p. 352. — Stromatibus tantum epiphyllis, in maculis vix decoloratis v. brunneolis insidentibus, parvis, rotundatis, 1 mm. diam., in greges 0,5-1 mm. diam. plus minus regulariter congestis sed non v. vix confluentibus; folium saepe late tegentibus, subcuticularibus, ex hyphis griseo-brunneis parallelis 4-5 μ cr. efformatis; clypeo 50-80 μ cr. opaco; loculis 300-450 μ latis, 150-240 μ altis; ascis cylindraceis, paraphysatis, 70-90 \times 10-16; sporidiis distichis v. inordinatis, ellipsoideis utrinque rotundatis, unilocularibus, hyalinis, 11-14 \times 8-9,5.

Hab. in foliis *Fici* sp. (F. Caricae prox.) (Moraceae), Lourenco Marques, Africa lusitânica (leg. C. W. HOWARD comm. J. B. POLE EVANS).

12. ***Trabutia Butleri*** Theiss. et Syd., *Ann. Mycol.* 13., 1915, p. 354. — Stromatibus epiphyllis irregulariter sparsis, in greges 1-2 cm. lat. dispositis, 1 mm. diam. v. conflendo 2-3 mm. plano-convexis, vix nitidis, sinuatis, subcuticularibus; contextu ex hyphis parallelis 4-6 μ cr. brunneolis, prosenchymaticis conflato; sursum atro, 30-50 μ crasso; loculis 300-400 \times 150-200; ascis tereti-clavatis, paraphysatis, 70-80 \times 10-15, octosporis; sporidiis 1-2-seriatis, oblongo-ellipsoideis, continuis, hyalinis, 13-16 \times 6.

Hab. in foliis, infra paullulum dealbatis, *Fici* sp. (Moraceae), Wahja in Assam, Bengala (leg. A. L. SOM, com. BUTLER).

13. *Trabutia novoguineensis* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 5119 354. — Stromatibus epiphyllis, supra vix maculiferis, infra flavo-rubefacentibus, late sparsis, atro-nitidis, suborbicularibus, 2-5 mm. diam., v. conflundo 2-5 mm. latis v. elongatis 8 mm. usque, subcuticularibus, contextu ex hyphis parallelis 5-8 μ cr. brunneis conflato; clypeo 40-60 μ cr., firmo, opaco; loculis valde inaequalibus, 300-400 \times 120-180; ascis cylindraceutis, paraphysatis, 60-85 \times 12-14; sporidiis monostichis, ellipsoideis, v. ovoideis, late rotundatis, continuis, hyalinis, 10-11 \times 8-9.

Hab. in foliis *Fici* sp. (Moraceae), Kelano, Nova Guinea (KÄRNBACH).

14. *Trabutia inimica* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 354. — 5120 Stromatibus epiphyllis, dense dispositis, folium supra dealbantibus, infra brunneo-rubefacentibus, ex orbiculato conoideis, 0,6-0,8 mm. diam., 350-400 μ altis, saepius confluentibus, nigris, vix nitentibus, subcuticularibus; contextu ex hyphis rufo-brunneis, 8-10 μ cr. remote (40-50 μ) articulatis demum stratum minute parenchymaticum formantibus conflato; loculis majusculis, depresso ellipsoideis, 550-650 \times 280-350; ascis tereti-clavatis, paraphysatis, 60-70 \times 10-14; sporidiis octonis, transverse monostichis, continuis, hyalinis, oblongis utrinque rotundatis, 17-19 \times 6, rectis.

Hab. in foliis indeterminatis (*Fici* sp. ?), Congo, Africa (VANDERYST).

15. *Trabutia chinensis* Yates, Philippine Journ. of Sc. C. Bot., 1917, 5121 v. XII, n. 5, p. 314 (corr. T. chinense). — Stromatibus epiphyllis, in maculis decoloratis 1-2 mm. diam. insidentibus, solitariis v. aggregatis et tunc greges convexulos atros irregulares usque 1 cm. diam. efformantibus; loculis 1-3, lenticularibus, 250-400 μ diam. 100-125 μ alt.; ascis clavatis apice rotundatis, octosporis, 60-70 \times 18-20, breviter stipitatis, paraphysibus filiformibus circumdatis; sporidiis oblique 1-2 distichis, ellipsoideis, unilocularibus, hyalinis, 16-18 \times 8-9.

Hab. in foliis *Fici* sp. (Moraceae), Loh Fam (Lofaushan), Kwangtung Prov., China austr. (MERRILL).

16. *Trabutia portoricensis* F. L. Stevens, Bot. Gazette 70., 1920, p. 5122 401, fig. 3. — Stromatibus in maculis subcircularibus dense insidentibus, maculis primum pallidis demum aridis et brunnescentibus; clypeo in epiphyllis prominenti nigro 80-95 μ diam., ostiolo

centrali 10-15 μ diam., loculis in mesophyllo immersis; ascis irregularibus tenuiter tunicatis, octosporis, $68 \approx 17$, paraphysatis; sporidiis inordinatis, filiformibus, oblongis, obtusis, continuis, hyalinis, $24 \approx 7$.

Hab. in foliis *Coccolobis niveae* (Polygonaceae), Mayaguez, Porto Rico.

17. *Trabutia Escalloniae* (P. Henn.) Th. et Syd., Ann. Mycol. 13., 1915, 5123 p. 351, *Phyllachora Escalloniae* P. Henn., nec. Pat., in Rehm Hedwigia 40., 1901, p. (104) et Ascomyc. n. 1384. — Stromatibus irregulariter rotundatis, parum elevatis 160-180 μ altis 1,5-2 mm. latis inter cuticula et epidermide nidulantibus, contextu intus pallide flavo-brunnescenti subplechtenchymatico, supra minute parenchymatico e cellulis 3,5-4 μ cr. parietibus brunneis donatis efformato; loculis parietibus propriis nullis praeditis, depresso globosis, sparsis, 120-140 μ latis 85-100 μ altis. Sterilis.

Hab. in foliis *Escalloniae rubrae* (Saxifragaceae), Lacus Quillen, Rep. Argentina (F. W. NEGER).

TRABUTIELLA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 180; 13., 1915, p. 359. Est *Trabutia* paraphysibus destituta.

1. *Trabutiella congregata* Syd., Ann. Mycol. 15., 1917, p. 223. — 5124
mata 1-locularia in greges orbiculares vel parum elongatos 1-3 mm. longos dense disposita, subcuticularia, minuta, 120-190 μ diam., convexa, nitida, clypeo atro usque 20 μ crasso, membrana basali plana tenuissima; asci sessiles, plerumque saccati, ad apicem plus minusve incrassati, 100-160 \approx 40-60, aparamphysati, 8-sporei; sporae ellipsoideae, continuuae, utrinque rotundatae, hyalinae, 32-38 \approx 18-20, distichae vel conglobatae.

Hab. in foliis *Heterospathae* sp. (Palmae), Bulusan Volcano prov. Sorsogon, Luzon, Ins. Philipp. (M. RAMOS).

CATACAUMA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 280; 13., 1915, p. 371. — Stroma applanatum, inter epidermidem et stratum subepidermale, clypeo epidermali tectum, verticaliter prosenchymatice constructum (typice); loculi immersi; asci paraphysati octospori; sporidia hyalina simplicia.

1. *Catacauma Ocoteae* F. L. Stevens, Bot. Gazette 69., 1920, p. 251. — 5125
Maculis irregularibus rotundatis 0,5-1 cm. diam. et ultra fere indefinitis utrinque visibilibus brunnescentibus; stromatibus rotundatis numerosis, sparsis, suora applanatis infra cupulatis, 1-1,5

mm. diam.; clypeo hypophyllo raro epiphyllo expanso 60-110, infra cupulatis, 1-1,5 mm. diam.; clypeo hypophyllo raro epiphyllo expanso 60-110 μ crasso; loculis numerosis 300 μ diam., irregularibus; ascis 4-8 sporis, 85-102 \times 7, angustis, infra longe sterilibus; paraphysibus filiformibus obvallatis, sporidiis unilocularibus, hyalinis, oblongis, 14-20 \times 3,5.

Hab. in foliis *Ocoteae leucoxylois* (Lauraceae), Mt. Alegrillo, Porto Rico.

2. *Catacauma Acaciae* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 389. — 5126
Stromatibus epiphyllis numerosis, hypophyllis paucioribus, ambitu circularibus, 0,4-0,5 mm. latis, hemisphaerico-convexis, sordide nigris, tantum vertice nitidulis, unilocularibus, subepidermicis, 130-180 μ altis, stromate clypeiformi, hypothecio hyalino, fibroso; loculo cavitatem totam implente; ascis paraphysatis, cylindraceutis, stipitatis, 80 \times 8-10, p. sporif. 55-60 μ longa; sporidiis monostichis, ellipsoideis, hyalinis, continuis, utrinque rotundatis, 10-12 \times 5-6.

Hab. in foliis *Acaciae leucophloae* (Leguminosae), Madras, Ind. orient. (W. MAC RAE).

3. *Catacauma Dussiae* Sydow, Ann. Mycol. 18., 1920, p. 159. — Stro- 5127
mata semper epiphylla, per totam folii superficiem plus minus dense distributa, rotundata, 0,5-1 mm. diam., valde convexa, atra, nitida, subepidermalia; loculi 250-400 μ lati, 200-250 μ alti, strato basali 15-20 μ crasso brunneo, clypeo epidermali crasso opaco usque 40 μ ; asci cylindraceuto-clavati, copiose paraphysati, octospori, 60-70 \times 14-20; sporae 1-2-stichae, oblongae, utrinque obtusae, hyalinae, 15-20 \times 5-6.

Hab. in foliis *Dussiae martinicensis* (Leguminosae), Guadalupa (DUSS).

4. *Catacauma Pterocarpi* (Syd.) Syd., Ann. Mycol. 13., 1915, p. 387, 5128
Phyllachora Pterocarpi P. et Syd. Ann. Mycol. X, 1912, p. 40. — Stromatibus epiphyllis, sparsis, minutis, rotundatis v. irregularibus, $\frac{3}{4}$ -2 mm. diam., atris nitentibus; loculis parum prominulis 3-10 in quoque stromate, rotundatis, 150-200 μ diam.; ascis cylindraceuto-clavatis v. clavatis, apice rotundatis, 45-80 \times 15-25, octosporis; sporidiis oblique monostichis usque irregulariter distichis, late ellipsoideis, utrinque rotundatis, continuis, hyalinis, 14-18 \times 8-11.

Hab. in foliis *Pterocarpi angolensis* (Leguminosae), Letaba Drift, Zoutpansberg, Transvaal (E. M. DOIDGE), Pt. saxatilis, Java, Pt. indici, Ins. Philippinis. — Cum *Phyll. Pterocarpi* Rehm comparanda (cnfr. *Phyllachora*) nec non cum *Placo-*

stroma Pterocarp (Mass.) Th. et Syd.

5. *Catacauma valsiforme* (Rehm) Theiss. et Syd., Ann. Mycol. 13., 1915, 5129 p. 379, *Phyllachora valsiformis* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 398. — Stomatibus in maculis dilutissime flavidulis hypophyllis, in epiphyllis vix conspicuis adnatis, singularibus, dein 3-10 gregariis, orbicularibus, atris, nonnullis demum in maculis atramentose nigris interdum circularibus confluentibus, 1,5-2,5 mm. latis, in eorumque centro convexo, demum dilute albidulo, late nigro-marginato papillis loculorum 2-5 innatorum protuberantibus obsessis; ascis clavatis, apophysatis, octosporis, 60-15; sporidiis distichis, oblongis, rectis, utrinque obtusis, biguttatis, hyalinis, 12-6.

Hab. in foliis *Fici crassitorae*, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — *Ph. circinatae* proxima, quae vero stomatibus epiphyllis gaudet.

6. *Catacauma Garciae* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 381. — 5130 Stomatibus epiphyllis in areis viridulis, obsoletis, infra vero prominentibus 1-2 cm. latis 4-10 insertis, in greges irregulares, subinde concentricos digestis, non v. vix confluentibus, 1-3 mm. longis, 1-2 mm. lat., plerumque 2-3-locularibus; clypeo epidermico opaco, 50-65 μ cr., contextu parallelo prosenchymatico, hyphis brunneis 4-5 μ cr.; loculis depresso-globosis, 300-380-150-220, maturitate vertice cum clypeo dehiscens; ascis octosporis, breviter stipitatis, 50-60-12-16; sporidiis oblongis utrinque obtuse tenuatis, continuis, hyalinis, 14-17-6-6,5.

Hab. in foliis *Fici Garciae*, Puerto Princessa, ins. Palawan ex Philipp. (ELMER).

7. *Catacauma lagunense* (Syd.) Syd. in Th. et Syd., Ann. Mycol. 13., 1915, p. 378, *Phyllachora lagunensis* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 278. — Maculis epiphyllis, rotundatis, fuscidulis, 3-8 mm. diam., leniter depressis; stomatibus hypophyllis, nunquam epiphyllis, in greges maculis oppositos densiuscule distributis, minutis, non vel vix confluentibus, 0,5-1 mm. diam., rotundatis, convexis, centro nitidis, intus paucilocularibus; ascis cylindraceo-clavatis, 60-80-8-12, octosporis; sporidiis subglobosis vel late ellipsoideis, continuis, hyalinis, 9-11-7-9.

Hab. in foliis vivis *Fici Hautili* (Moraceae), Luzon, Prov. Laguna, ins. Philipp. — *Ph. apoensis* Syd. affinis; differt stomatibus dense aggregatis et sporidiis minoribus.

8. *Catacauma sanguineum* (Rehm) Theiss. et Syd., Ann. Mycol. 13., 1915, 5132

p. 379, *Phyllachora circinata* Syd. — Syll. XXII p. 421 — var. *sanguinea* Rehm, Ascomyc. Philipp. VI, Leaflets of Philipp. Botany, VI (1914) p. 2274. — Stromatibus epiphyllis in maculis discoidalibus sanguineis, 5 mm. usque latis et in hypophyllo conspicuis innatis.

Hab. in Fico heterophylla, Los Baños, ins. Philipp. (BAKER).

9. *Catacauma Elmeri* Syd. in Theiss. et Syd., Ann. Mycol. 13., 1915, 5133 p. 378, *Phyllachora Elmeri* Syd., Leaflet. Philipp. Bot. 1911, Art. 62, p. 1157 et in l. c.; Philipp. Journ. of Sc. 1913 (C) n. 4 p. 278. — Stromatibus epiphyllis, in hypophyllo haud conspicuis, sparsis, minutis, rotundatis, 0,5-1 mm. diam., atris, intus 1-paucilocularibus; ascis clavatis vel clavato-saccatis, breviter pedicellatis, 40-60 μ longis, 11-18 μ latis, octosporis; sporidiis monostichis vel irregulariter distichis, subglobosis vel late ellipsoideis, continuis, hyalinis, 10-14 μ longis, 8-10 μ latis.

Hab. in foliis vivis Fici manilensis et F. blepharostomae, Todaya, Ms. Apo, Distr. Davao, ins. Mindanao in Philipp. (ELMER).

10. *Catacauma microcentum* (B. et Br.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 384 — var. *graphica* Th. et Syd., l. c. p. 385, tab. VI fig. 6. — *Phyllachora microcenta* B. et Br., Syll. II p. 595. — Stromatibus epiphyllis, crebris, 0,5-1 mm., lineatis v. breviter extantibus, v. impressis, minute anulatis; loculis 400-500 \times 250-350; sporidiis 13 \times 6-6,5.

Hab. in foliis Fici mysorensis, Mysore, Ind. orient. (BUTLER).

11. *Catacauma nipponicum* Sydow, Ann. Mycol. XIII, 1915, p. 40 et 5135 p. 379. — Stromatibus epiphyllis, singulis etiam hypophyllis, plus minus dense sparsis vel irregulariter distributis, non vel vix confluentibus, rotundatis, ca. 1 mm. diam., valde convexis, usque 200 μ altis, atris, nitidulis, 1-vel paucilocularibus, subepidermalibus, clypeo 25-35 μ crasso; loculis lenticularibus, 90-100 μ altis, usque 400 μ longis; ascis clavatis, 44-60 \times 12-15, paraphysatis, octosporis; sporidiis oblique monostichis vel distichis, continuis, ellipsoideis, hyalinis, obtusis, 12-16 \times 5,5-7.

Hab. in foliis Fici nipponicae, prov. Iden, Amayi, Japonia (M. SHIIM).

12. *Catacauma apoense* (Syd.) Syd., Ann. Mycol. 13., 1915, p. 379, 5136 *Phyllachora apoensis* Syd., Leaflet. Philipp. Bot. IV, 1911, art. 62,

p. 1157. — *Stromatibus hypophyllis*, in epiphyllis haud conspicuis; sparsis, rotundatis vel irregularibus, 0,5-2 mm. longis, atris, intus paucilocularibus; ascis clavatis vel clavato-saccatis, breviter pedicellatis, 50-75 μ longis, 11-18 μ latis, octosporis; sporidiis irregulariter distichis vel oblique monostichis, ellipsoideis, continuis, hyalinis, 14-18 μ longis, 7-9 μ latis.

Hab. in foliis *Fici sibulanensis* et *F. apoensis*, Todaya Ms. Apo, Distr. Davao, ins. Mindanao in Philippinis (ELMER).

13. *Catacauma urophyllum* (v. Höhn.) Th. et Syd., Ann. Myc. 13., 1915, 5137 p. 382, cum icon., *Phyllachora urophylla* v. Höhn. Fragm. zur Mykol. 772, in Stzgsb. Akad. Wiss. Wien CXXI, 1, p. 390, fig. 2 (1912). — *Stromatibus hypophyllis*, linearibus, nervos tegentibus ideoque interdum ramosis, 700 μ usque latis, 250 μ crassis, superne convexis inferne concavis, nitidis, ob ostiola verruculoso-punctatis, contextu violaceo-atro, minute parenchymatico; loculis longitudinaliter seriatis, 300-600 μ longis, 159 μ crassis, 400 μ usque latis; ascis clavatis subsessilibus, tenuissime tunicatis, 60 \times 10-16, paraphysibus filiformibus copiose obvallatis; sporidiis monostichis vel irregulariter dispositis, breviter oblongo-cylindraceis, utrinque late rotundatis, medio subconstrictis, intus granulosis, hyalinis, 12-15 \times 6-8,5.

Hab. in foliis vivis *Fici urophyllae*, Tjibodas, Java. (Rehm, Ascomyc. exs. n. 1947).

14. *Catacauma maquilingianum* Syd., Ann. Mycol. 14., 1916, p. 364. — 5138 *Stromatibus* semper epiphyllis, partibus foliorum maculiformiter decoloratis brunneolis vix determinatis insidentibus, sparsis, rotundatis, 1-2,5 mm. diam., discretis raro binis confluentibus, atris convexis, nitidulis, sub epidermide evolutis; loculis 1-3 in quoque stromate, depresso-globosis, 250-450 μ latis, 170-250 μ altis, parietibus lateralibus et basali ca. 10 μ crassis; clypeo 30-40 μ crasso, opaco, aterrimo; contextu stromatibus ex hyphis 5-6 μ crassis olivaceo-vel fumoso-brunneolis composito; ascis oblongis vel clavatis, paraphysatis, 55-70 \times 18-22, octosporis, J —; sporis 1-2-stichis, ovatis vel late ellipsoideis, utrinque late rotundatis, continuis, hyalinis, 12-15 \times 8-9.

Hab. in foliis *Fici* sp., in summo vertice M. Maquiling, ins. Philipp. (C. F. BAKER).

15. *Catacauma Ravenalae* (Pat. et Har.) Theiss. et Syd., l. c., *Phyllachora Ravenalae* Pat. et Har., Bull. Soc. Mycol. Fr. 28., 1912, p. 283. — Maculis nullis; stromatibus epiphyllis elongato-ellipsoideis,

bullaceis, nitentibus, atris, usque 15 mm. longis, 3.5 mill. latis, loculis 3-7; ascis clavatis, brevissime stipitatis, 50-60 \times 25-30, octosporis filiformi-paraphysatis; ascosporis subdistichis, hyalinis, egutulatis, ovoideis, utrinque acutiusculis, 12-14 \times 5-8.

Hab. in foliis *Ravenalae madagascariensis* (Musa-ceae), Ste-Marie de-Madagascar (BOIVIN).

16. *Catacauma palmicola* F. L. Stevens, Bot. Gazette, 69., 1920, p. 251, 5140
 tav. XIII fig. 10-12. — Stromatibus subepidermicis, supra conspicuis infra minutis, nigris, nitidis, ovoideis, 1-6 \times 1.3 mm., 300 μ cr., superficie rotundatis sparsis, solitaris v. gregariis et plus minus confluentibus; maculis effusis brunneis; loculis irregularibus 500-600 μ latis contextu infra hyalino, tenui, lateraliter brunneo crasso: elypeo nigro, 60-100 μ cr.; ascis numerosis octosporis, saccatis, tenuiter tunicatis; sporidiis inordinatis, cylindraceis, 23-43 \times 12-14, hyalinis, continuis.

Hab. in foliis *Thrinacis ponceanae* (Palmae), Vega Baja, Porto Rico.

17. *Catacauma cubense* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 391. — 5141
 Stromatibus epiphyllis, circinatis, atro-nitidis, minutis, hemisphaericis, ambitu irregulariter circulari, levibus, 0.3-0.5 mm. lat. unilocularibus v. confuendo bilocularibus et tunc ellipsoideis, zona stromatica depressa, atra, 1 mm. lata cinctis; loculis 370 \times 180-200, tenuiter tunicatis; ascis clavatis, parce paraphysatis, breviter stipitatis, 70-80 \times 15-20; sporidiis distichis, oblongo-ellipsoideis, hyalinis, utrinque rotundatis, 16-18 \times 8.

Hab. in foliis *Sapindaceae* cujusdam, Cuba (WRIGHT, F. Cub. n. 865, sub nom. *Doth. repens* Berk.).

18. *Catacauma Patouillardi* F. Theiss., Verh.-zool.-bot. Ges. Wien Bd. 5142
 69., 1919, p. 13 (nom. nov.) — Syn. *Stigmatula nitens* (Pat.) Syd. — Syll. XVI p. 454. — Ita vocanda quia jam extat *Catacauma nitens* (Lév.) Th. et Syd. 1916.

CATACAUMELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 400. — Est *Catacauma* paraphysibus destituta. — Typ. gen.:

1. *Catacaumella Miconiae* (P. Henn.) Theiss. et Syd., l. c., *Phyllachora* 5143
Miconiae P. Henn., Syll. XI p. 371. — Syn. *Phyll. Henningsiana* Sacc., Ann. Mycol. 1913, p. 547, *Physalospora pelladensis* P. Henn.
 2. *Catacaumella Gouaniae* F. L. Stevens, Bot. Gazette, 69., 1920, p. 252, 5144
 tab. XIII fig. 14-15. — Plerumque epiphylla raro hypophylla. Maculis stromata vix excedentibus infra vix visibilibus; stromatibus

copiosis subrotundatis 2-3 mm. diam., rugosulis, nitide nigris subepidermicis; loculis latis, depressis, 500 μ latis 150-160 μ circ. altis, solitariis v. aggregatis in quoque stromate distincte ostiolatis; ascis tenuifer tunicatis, irregularibus octosporis, 61-68 \times 10-11 inordinatis; sporidiis hyalinis unilocularibus ovoideis v. piriformibus, irregularibus 14-20 \times 10; paraphysibus nullis.

Hab. in foliis *Gouaniae polygamæ* (Rhamnaceæ), Mayaguez, Salinas, Dos Bocas, Maricao, *G. lupuloidis*, Arecibo Lares, Porto Rico.

SCHIZOCHORA Syd., Ann. Mycol. 11., 1913, p. 265, et in Leaflets of Philipp. Bot. VI (1913) p. 1929 — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 401. — Etym. *schizo*, fendo et *achor*, ulcus. — Est *Oatacauma* paraphysata, sporidiis hyalinis continuis utrinque appendiculatis praedita.

1. **Schizochora Elmeri** Syd., loc. cit. — Stromatibus hypophyllis, in epi- 5145
phylo maculas obsoletas atro-fuscas efficientibus, in hypophyllo zona angusta flavidula cinctis, sparsis, hemisphaerico-prominentibus, rotundatis vel ellipticis aut oblongis, subinde etiam angulatis, 1-1,25 mm. diam., usque ad 1 mm. altis, atris, opacis, irregulariter rimose dehiscens; loculis 1-4 in quoque stromate, 200-300 μ diam.; ascis clavatis, apice rotundatis, sessilibus, 55-75 \times 15-20, octosporis; paraphysibus numerosis, filiformibus, ca. 1 μ crassis, tandem mucosis; sporidiis distichis, oblongo-fusoideis, continuis, utrinque attenuatis, primitus minute granulosis, hyalinis, 17-20 \times 6,5-8, utrinque appendicula hyalina tenui 2-4 μ longa praeditis.

Hab. in foliis vivis *Fici Guyeri* (Moraceæ), Dumaguete, Negros Oriental, ins. Philipp. (A. D. E. ELMER).

PHYLLACHORA Nits. — Syll. II p. 594, IX p. 1006, XI p. 368, XIV p. 663, XVI p. 617, XVII p. 828, XXII p. 410.

1. **Phyllachora atro-maculans** H. et P. Sydow, Ann. Mycol. XI, 1913, 5146
p. 264; Fungi exot. ext. 132. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 477. — Stromatibus spermogonicis amphigenis, maculis atro-fuscis orbicularibus v. irregularibus 0,5-1 cm. diam. insidentibus, in maculis irregulariter v. circinatim dispositis, in utraque foliorum pagina leniter prominulis, rotundatis, $\frac{1}{3}$ - $\frac{3}{4}$ mm. diam., atris, opacis; loculis paucis (1-4) in quoque stromate, globulosis; sporulis filiformibus, hyalinis, tenuissimis, 18-35 \times 0,5-0,7, irregulariter curvatis; stromatibus perithecligeris conformibus, sed minus

opacis et subinde leniter nitentibus; ascis clavatis, 80-110 \times 12-18, filiformiter paraphysatis, octosporis; sporidiis oblique monostichis usque distichis, ellipsoideis v. oblongis, utrinque obtusis v. parum attenuatis, continuis, intus pluriguttulatis, hyalinis, 15-21 \times 7-8.

Hab. in foliis vivis *Anonae* sp. (Anonaceae), San José, Costa-Rica (A. TONDUZ).

2. *Phyllachora maquilingensis* Sydow, Ann. Mycol. 18., 1920, p. 100. — 5147

Maculae propriae nullae; stromata in epiphyllis conspicua, per totam folii superficiem dispersa, hinc inde pauca aggregata, minuta, usque 250 μ diam., nitidula, 1-locularia, clypeo epiphyllis crasso atro, hypophyllo minus evoluta; locus usque 200 μ latus, totam folii crassitudinem occupans; asci cylindraceuti, apice obtusi, ca. 80 \times 10-14, octospori paraphysati; sporae ellipsoideae, continuae, obtusae hyalinae, 11-14 \times 6-7; conidia in stromatibus similibus aequaliter 1-locularibus oriunda, continua, oblonga, utrinque obtusa vel etiam leniter attenuata, saepe etiam uno apice late obtusa, altero acutata, hyalina, copiose evoluta, 12-16 \times 4-5.

Hab. in foliis *Polyalthiae* spec. (Anonaceae), Mt. Maquiling, prov. Laguna, Ins. Philippin. (T. COLLADO).

3. *Phyllachora maculicola* Syd., Ann. Mycol. 14., 1916, p. 83. — Macu- 5148

lis distinctissimis, amphigenis, primitus ochraceis, dein exsiccano albido-ochraceis vel albidis, sparsis, orbicularibus, 0,5-1 cm. diam.; stromatibus in utraque foliorum pagina visibilibus, aggregatis, sed haud confluentibus, minutissimis, punctiformibus, 0,25-0,4 mm. diam in epiphyllis nitidis, in hypophyllo opacis, leniter tantum convexus, loculum singulum includentibus; clypeo in utraque epidermide, 20-30 μ crasso, loculis globulosis, ca. 200-250 μ diam., totum mesophyllum occupantibus; ascis cylindraceuto-clavatis, octosporis, paraphysatis, 80-100 \times 12-15, sporidiis distichis, fusoides, utrinque attenuatis, hyalinis continuis, 20-24 \times 4-4,5.

Hab. in foliis *Aspidospermatis* sp. (Apocynaceae), Serin-gal Auristella, Rio Acre, Peruvia (E. ULE).

4. *Phyllachora Ajrekari* H. et P. Syd., Ann. Mycol. X, 1912, p. 408; 5149

Fungi exot. exsicc. 259; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 548. — Stromatibus amphigenis, sparsis, irregularibus, subinde confluentibus, 1,5-5 mm. diam., opacis, atris, in epiphyllis levibus, in hypophyllo ob loculos prominulos saepe leviter rugosis; loculis numerosis (15-40) in quoque stromate, rotundatis v. irregularibus, 150-225 μ diam.; ascis cylindraceuto-clavatis, 80-100 \times 13-16, octosporis; sporidiis oblongo-fusoides, utrinque obtuse attenuatis, con-

tinuis, hyalinis, intus guttulatis, 20-25 \times 5-6.

Hab. in foliis petiolisque *Ceropegiae* ? *hirsutae* (Asclepiadaceae), Matheran Bombay Presid., Indiae or. (S. L. AJREKAR).

5. *Phyllachora Dischidia* Syd., Enum. Philipp. Fungi I, in Philipp. 5150 Journ. of Sci. VIII (1913), p. 277. — Stromatibus in utraque foliorum pagina conspicuis, sparsis, rotundatis, 1-2 mm. diam., atris, opacis, planiusculis, sublevibus, loculos 12-25 includentibus; ascis cylindraceis, apice obtusis, brevissime stipitatis, indistincte paraphysatis, 85-105 \times 9-11, octosporis; sporidiis distichis, fusiformibus, continuis, hyalinis, 24-27 \times 5-6.

Hab. in foliis vivis *Dischidia roseae* (Asclepiadaceae), Luzon, Prov. Bataan, Mt. Mariveles, ins. Philipp. (MERRILL).

6. *Phyllachora Metastelmæ* F. L. Stevens et N. Dalby, Bot. Gazette 5151 68., 1919, p. 57, tab. fig. 15-16. — Stromatibus nitide nigris 1-2 mm. latis, 5-15 mm. long., caulem circumdantibus et totum contextum corticis occupantibus; loculis circ. 200 μ diam. 120 μ altis; ascis octosporis; sporidiis cylindraceis hyalinis, continuis, 14 \times 5.

Hab. in caulibus *Metastelmæ* sp. (Asclepiadaceae), El Alto de la Bandera, Porto Rico.

7. *Phyllachora* ? *Ostryae* P. Henn. (corr. Ph. *Ostreae*) in Engler Bot. 5152 Jahrb. 29., 1900, p. 151. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 570. — Sec. Theiss. et Syd. l. c. minime *Phyllachora* sed potius *Mamiania* et tunc *Mam. Ostryae* (P. Henn.) Th. et Syd. vocanda (Betulaceae).

8. *Phyllachora nitens* Ph. Garman, Mycologia v. VII, 1915, p. 339. — 5153 Stromate maculam latam nigram nitidam efformante, quandoque aream 1 cm. et ultra latam tegente; ascis clavatis, octosporis, 100-110 \times 12-16; sporidiis plerumque ovatis, uno apice acutiusculis, hyalinis et leniter granulosis, 10-12 \times 6-8; paraphysibus praesentibus.

Hab. in foliis *Schlegeliae brachyanthae* (Bignoniaceae), Porto Rico: Maricao, Ponce, Monte Alegrillo, Rio Grande, Prestons Ranch.

9. *Phyllachora Bourreriae* F. L. Stevens et N. Dalby, Bot. Gazette 68., 5154 1919, p. 54, tab. fig. 3-4. — Maculis nullis. Stromatibus circularibus et nigris, copiosis, irregulariter sparsis, 1-2 mm. diam., utrinque aequè prominentibus, in mesophyllo evolutis; clypeo in epidermide amphigeno sed leniter perithecia excedenti; loculis numerosis, globulosis, 160 μ circ. diam. parietibus definitis; ascis cylindraceis octosporis, 85 \times 9-12; sporidiis hyalinis unilocularibus, 12-16 \times 6-7,

Hab. in foliis *Bourreriae succulentae* (Borraginaceae), Vega Alto, Joyuda, Porto Rico.

10. *Phyllachora caffa* (Syd.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5155 p. 548, *Physalospora caffa* H. et P. Syd., Ann. Mycol. X. 1912, p. 39. — Peritheciis maculis pallidis v. brunneolis indeterminatis saepe confluentibus insidentibus, densiuscule aggregatis, profunde immersis, utraque foliorum pagina conspicuis, globosis, atris, papillatis, 150-200 μ diam.; ascis cylindraceis, apice rotundatis, 75-90 \times 9-12, filiformiter paraphysatis, octosporis; sporidiis monostichis, late ellipsoideis, continuis, hyalinis, 11-13 \times 6-8.

Hab. in foliis *Cordia caffrae* (Borraginaceae). Amanzimtote Natal, Africae austr. (E. M. DODGE).

11. *Phyllachora Espeletiae* Syd. ap. Fuhrmann et Mayor, Voy. Expl. 5156 Scient. Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 436 (1913); Theiss. et Syd., Ann. Myc. 13., 1915, p. 556. — Stomatibus epiphyllis, irregulariter sparsis, rotundatis vel irregularibus, conicoprominulis 0.5-2 mm. latis, atris, opacis, glabris, intus 1-3-locularibus; ascis cylindraceis vel clavatis, apice rotundatis, 95-120 \times 16-20, octosporis; sporidiis late ellipsoideis, utrinque subinde leniter acutiusculis, saepe inaequilateris, continuis, hyalinis, 15-20 \times 9-11.

Hab. in foliis *Espeletiae corymbosae* (Compositae), in regione andina (dep. Cundinamarca) in Columbia, alt. 2800-3300 m.

12. *Phyllachora perlata* Syd. ap. Fuhrmann et Mayor, Voy. Expl. Scient. 5157 Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 436 (1913). — Stomatibus hypophyllis, hemisphaerico-prominulis, in epiphyllis etiam conspicuis sed non prominentibus, sparsis, solitariis vel hinc inde paucis aggregatis et subconfluentibus, minutis, rotundatis, $\frac{1}{3}$ - $\frac{3}{4}$ mm. diam., levibus, glabris, nitidulis, aterrimis, intus plerumque 1-raro 2-locularibus; ascis cylindraceis, apice obtusis, 80-120 \times 11-14, octosporis; sporidiis monostichis, late ellipsoideis, continuis, utrinque late rotundatis, hyalinis, 13-16 \times 8-12.

Hab. in foliis *Polymniae glabratae* (Compositae), in Andis orientalibus (dép. Cundinamarca) in Columbia, alt. 2400-3200 m.

13. *Phyllachora vernoniicola* P. Henn. — Syll. XVII p. 836 — var. *microspora* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 558; Theiss.. 5158 Decad. F. Brasil. 87 (sub *Ph. vernoniicola* P. H.). — Stomatibus in maculis pallescentibus indistincte rotundatis 3-5 mm. diam. insidentibus, $\frac{1}{3}$ mm. cr., utrinque nitide nigris elevatis; ascis cy-

lindraceis pedunculatis, paraphysatis p. sp. 55-60 \times 8-10; sporidiis ellipsoideis, 9-12 \times 5,5-6,5.

Hab. in foliis *Vernoniae Tweediana* (Compositae), Rio Grande do Sul, Brasilia (J. Rick).

14. *Phyllachora leopoldensis* Theiss. et Syd., Ann. Mycol. 13., 1915, 5159 p. 563. — Rehm, Ascom. 1791 (sub *Physalospora*? *varians* Starb.). — Stromatibus epiphyllis punctiformibus, in maculis sparsis 2-5 mm. latis griseo-ferrugineo-brunneis insidentibus; stromatibus, quandoque etiam hypophyllis, nitidulis, 150-200 μ crassis, unilocularibus, loculis globosis 180-200 μ diam.; clypeo parum evoluto; ascis cylindraceo-clavatis, paraphysatis, 65-78 \times 11-16; sporidiis ellipsoideis, monostichis v. distichis, hyalinis, unilocularibus, utrinque rotundatis, 12-15 \times 7-8.

Hab. in foliis ignotis (? Compositae), Sao Leopoldo, Rio Grande do Sul, Brasilia (Rick).

15. *Phyllachora Connari* Syd., Philipp. Journ. of Sc. IX, 1914, n. 2 5160 p. 168; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 487. — Stromatibus sparsis, innatis, in utraque foliorum pagina conspicuis, minutis, rotundatis vel angulatis, non confluentibus, 1-3 mm. longis, atris, in epiphyllis planis opacis, in hypophyllo ob loculos prominosos parum nitidos rugulosos; loculis 10-40 in quoque stromate, globosis; ascis cylindraceo-clavatis, subsessilibus, 70-88 μ longis, 10-13 μ latis, octosporis; sporidiis oblique monostichis usque distichis, oblongis, utrinque rotundatis, saepe superne angustioribus continuis, hyalinis, 16-18 \times 3,5-4.

Hab. in foliis *Connari* (Connaraceae), Palawan, Ins. Philipp. (Merrill).

16. *Phyllachora connarina* Racib. in Theiss et Syd., Ann. Mycol. 13., 1915, p. 487. — Stromatibus rotundatis v. rotundato-polygoniis, 2-3 mm. latis nervulis limitatis, in maculis rubridis violaceo limitatis insidentibus; stromatibus depressis 8-20-ocularibus, loculis rotundatis, in hypophyllo ostiolatis, 100-125 μ latis et altis; paraphysibus filiformibus, aegre conspicuis; collabescentibus; ascis elongato-cylindraceis, 86-95 \times 6, octosporis; sporidiis levibus hyalinis, ellipsoideis, monostichis, 6-7 \times 3, utrinque rotundatis.

Hab. in foliis juvenilibus *Connari* sp. (Connaraceae), Depok prope Buitenzorg. — A Ph. *Connari* Syd. sporidiis praecipue diversa.

17. *Phyllachora Roureae* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1912) p. 277; Syd., Fung. exot. exs. 187. — Stromatibus epiphyllis, in hypophyllo etiam visibilibus, zona ochraceo-

brunnea 1 mm. circ. lata circumdatis, immersis, planis, haud prominulis, rotundatis, 1,5-2,5 mm. diam.; loculis 5-10 in quoque stromate, minutis; stylosporibus filiformibus, rectis vel leniter curvatis, uno fine saepe latioribus quam altero, hyalinis, continuis, 24-46 \times 1-1,5; ascis sporidiisque.... immaturis tantum visis.

Hab. in foliis vivis *Boureae erectae* (Connaraceae), Luzon, Prov. Bataan, Mt. Mariveles, ins. Philipp. (P. W. GRAFF). — Species rursus inquirenda, et potius ut *Phyllachora delenda* — Onfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 575.

18. *Phyllachora Pycrei* Syd., Ann. Mycol. 15., 1917, p. 226. — Stro- 5163
mata sparsa, elliptica vel oblonga, 1-2 mm. longa 0,5-1 mm. lata, parum nitidula, vix vel leniter convexa atra, amphigena, clypeo epidermali 20-25 μ crasso; loculi copiosi in quoque stromate, densissime stipati, globosi vel e mutua pressione angulati vel compressi, 80-160 μ diam., totam folii crassitudinem occupantes, parietibus brunneis 10 μ crassis; asci cylindranei, stipitati, paraphysati, 70-90 \times 9-10; sporae fusoidae, continuæ, hyalinae, utrinque acutae, 15-20 \times 4-5.

Hab. in foliis *Pycrei polystachyi* (Cyperaceae), Manila, Ins. Philipp. (M. RAMOS). — *Ph. Cyperi* affinis.

19. *Phyllachora schoenicola* H. et P. Sydow, Ann. Mycol. XI, 1913, p. 5164
265. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 464. — Stromatibus in utraque foliorum pagina conspicuis, sparsis v. pauci-aggregatis et confluentibus, 0,5-3 mm. long., 0,5-1 mm. latis, modice prominentibus, aterrimis, superficie non rugulosis, minoribus 1-locularibus, majoribus plurilocularibus; loculis majusculis, 150-200 μ diam., ascis cylindraneis v. cylindraneo-clavatis, 75-95 \times 9-14, octosporis; paraphysibus numerosis, guttulatis, ascos superantibus, filiformibus, 1,25-1,5 μ crassis; sporidiis distichis, fusiformibus, utrinque attenuatis, saepe acutis, continuis, hyalinis, 20-25 \times 5-7, plasmate subinde bipartito, tandem spurie septatis (?).

Hab. in foliis vivis *Schoeni Apogi* (Cyperaceae), Mt. Banabao, ins. Philippinensium (E. B. COPELAND).

20. *Phyllachora Embelliae* v. Höhnelt, Ann. Mycol. 18., 1920, p. 92. — 5165
Maculis foliiculis rotundatis, subconfluentibus, rubro-violaceis, 1 cm. latis; peritheciis epiphyllis numerosis gregariis subconcentricis dispositis, immersis, ostiolo carbonaceo tantum prominentibus, globosis apice subconoidis 300 μ cr.; membrana perithecciorum molli pallida hinc inde rubro-brunnea 4-16 μ cr., subfibrosa; ostiolo rotundato-anguloso demum 20-30 μ lato; paraphysibus numerosis, fili-

formibus, collabescentibus; ascis plerumque cylindraccis tenuiter tunicatis sessilibus $65-80 \times 8-9$; sporis late ellipsoideis, hyalinis, tenuiter tunicatis intus granulosi, plerumque monostichis, $8-10 \times 6-7$.

Hab. in foliis vivis *Embeliae pergameneae* (Diapensiaceae), prope Depok, Ins. Java (M. RACIBORSKI). — Huic proxima sec. v. Höhn. *Physalospora circinnans* Pat. 1902.

21. *Phyllachora secunda* v. Höhn., Ann. Mycol. 18., 1920, p. 93. — 5166

Phyll. *Embeliae* v. Höhn. proxima a qua differt peritheciis non concentricis; apice perithecorum obscure rubro-brunneo nec carbonaceo, sporidiis majoribus, $12-14 \times 8-9$, ascis etiam majoribus $96 \times 8-10$.

Hab. in foliis *Embeliae Ribis* (Diapensiaceae), prope Depok, Ins. Java (M. RACIBORSKI).

22. *Phyllachora oblongispora* Syd. in Leaflets of Philipp. Bot. VI (1913) 5167

p. 1928; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 533. — Stromatibus in utraque foliorum pagina conspicuis, planis, rotundatis, 1-2 mm. diam., atris, opacis, intus plurilocularibus; ascis subclavatis, $60-70 \times 12-15$, octosporis; sporidiis distichis, oblongis, saepe leniter curvatis, utrinque rotundatis, continuis, hyalinis, $14-17 \times 4-5,5$.

Hab. in foliis vivis *Dipterocarpi subalpini* (Dipterocarpaceae), Cabadbaran, Mindanao, ins. Philipp.

23. *Phyllachora Mabae* (P. Henn.) Theiss. et Syd., Ann. Mycol., 13., 5168

1915, p. 546, *Dothidella Mabae* P. Henn., Hedw. vol. 48 (1918) p. 8. — Stromatibus amphididymis, sparsis vel aggregatis, plano-pulvinatis, rotundatis, atris, opacis, 1-2 mm. diam.; peritheciis immersis, subglobosis, obtuso-ostiolatis; ascis fusoides vel clavatis, obtusis, octosporis, $50-75 \times 8-15$, paraphysatis; sporidiis oblique monostichis vel distichis, oblongo-fusoides vel clavatis, hyalinis, continuis, dein medio 1-septatis, $18-24 \times 5-7$.

Hab. in foliis *Mabae inconstantis* (Ebenaceae), Morro Pellado, S. Paulo, Brasilia.

24. *Phyllachora Bischoffiae* Syd. in Syd. et Butler, Ann. Mycol. IX, 1911, 5169

p. 396. — Stromatibus amphigenis sparsis, minutis, rotundatis v. irregularibus, 0,5-1,5 mm. longis et latis, atris, zona angusta albidula vel cinerea e matricis contextu formata cinctis, subinde tandem deciduis et folium perforatum relinquentibus, loculis minutis, pluribus (5-20), leniter prominulis; ascis fusoides-clavatis, sursum attenuatis, brevissime stipitatis, $60-80 \times 10-17$, copiose paraphysatis, octosporis; sporidiis distichis, fusoides-cylindraccis, utrinque attenuatis v. uno fine obtusis, continuis, $20-26 \times 5-6,5$.

Hab. in foliis *Bischofia javanicae* (Euphorbiaceae), Panora Wyuaad, Indiae or. (W. MC RAE).

25. *Phyllachora drypeticola* F. L. Stevens et N. Dalby, Bot. Gazette 5170 68., 1919, p. 55, tab. fig. 7-8. — Maculis stromata non excedentibus; stromatibus numerosis, nigris, utrinque visibilibus, 1-2 mm. diam., clypeo stromata non excedenti; loculis rotundatis v. irregularibus, 100-200 \times 125; ascis cylindraceutis octosporis; sporidiis 17 \times 3,5, continuis, hyalinis.

Hab. in foliis *Drypetes* sp., Rio Tanamà prope Arecibo, *Drypetes glaucae* (Euphorbiaceae), El Gigante, Utuado, Maracao, Mayaguez, Porto Rico.

26. *Phyllachora Glochidii* Syd., Leafst. Philipp. Bot. IV, 1911, Art. 62, 5171 p. 1157. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 525. — Stromatibus epiphyllis, sparsis, minutis, ca. 1 mm. diam., rotundatis, atris, 1-paucilocularibus; ascis cylindraceutis, brevissime pedicellatis, apice rotundatis, 60-90 μ longis, 9-13 μ latis, octosporis; sporidiis oblique monostichis ellipsoideis, utrinque rotundatis, continuis, hyalinis, 14-16 μ longis, 5-7 μ latis.

Hab. in foliis *Glochidii mindanaensis* (Euphorbiaceae), Todaya ins. Apo, Distr. Davao, ins. Mindanao, in Philipp. (ELMER).

27. *Phyllachora subbrachyspora* Spegaz., Rel. Mycol. trop. etc., in Bol. 5172 Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 129. — Maculae nullae v. parvae pallescentes indeterminatae; stromata epiphylla innato-superficialia, suborbicularia 3-4 mm. diam. atra nitidula; loculi sat numerosi irregulares gyroso-daedaloides; asci subcylindraceuti v. leniter obclavati, apice obtusi, postice modice attenuato-pedicellati, parce grosseque pseudo-paraphysati, octospori; sporae monostichae v. subdistichae late ellipticae utrinque obtusissime rotundatae laeves hyalinae.

Hab. ad folia viva *Casearia* sp. (Flacourtiaceae), prope Apiaby, Brasilia (J. PUIGGALI).

28. *Phyllachora brachyspora* Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. 5173 Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 128. — Maculae nullae v. parvae indeterminatae epiphyllae; stromata innato-superficialia epiphylla suborbicularia 1,5-2 mm. diam. atra nitidula, loculis sat numerosis subglobosis parvis periphaericis; asci cylindraceuti breviuscule crasseque pedicellati, paraphysati; 65-70 \times 9-12; sporae ex elliptico subglobosae, utrinque late rotundatae, laeves, hyalinae, 10 \times 6-7.

Hab. ad folia viva *Caseariae* sp. (Flacourtiaceae), prope Apiahy, Brasilia (J. PUIGGARI).

29. *Phyllachora Xylosmatis* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5174
Buenos Aires XXIII (1912) p. 93. — Maculis nullis; stromatibus epiphyllis, subparvis, innato-prominulis, 5-20 inordinate vel subcircinatum gregariis, colliculosis, atris, levibus, nitidulis; loculis in quoque stromate 2-5, saepe subconfluentibus, semilenticularibus, 180-200 μ diam., albo-farctis; ascis subcylindraceis, apice obtusissimis vel subtruncatis, deorsum attenuatis et breviter pedicellatis, 90-120 \times 12-20, non vel parce paraphysatis; sporidiis oblique monostichis, ellipsoideis, utrinque acutiuscule rotundatis, hyalinis, grosse 1-guttulatis, 18-20 \times 11-12.

Hab. in foliis vivis *Xylosmatis pubescentis* (Flacourtiaceae), prope Calilegua, Argentina.

30. *Phyllachora Costaericae* Trott. n. nov., *Phyllachora Pittieri* Spegaz. 5175
Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 207, nec Theiss. et Syd. 1915. — Stromata epiphylla parva repandula, colliculoso-convexula, aterrima laevia nitida, loculis, paucis majusculis, 150-200 μ diam., albo-farctis; ascis linearibus mox diffluentibus, 90-120 \times 11-13; sporidiis mediocribus subcylindraceis obtusis non v. vix inaequilateralibus, 15-16 \times 7-9.

Hab. in foliis vivis *Xylosmatis Salzmanni* (Flacourtiaceae), prope Carthaginem, Costarica, America trop.

31. *Phyllachora assimilis* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 439. — 5176
Stromatibus folium perforantibus, solitariis v. paucis seriatis, ex ellipsoideis linearibus, 0,5-1,25 mm. long., opace nigris, convexis; clypeo effuso, laterali, 20-35 μ cr., opace nigro, compacto; loculis depresso globosis, 150-220 μ cr., parietibus fibrosis, brunneis 10 μ circ. cr.; ascis paraphysatis, cylindraceis v. subglobosis, breviter pedicellatis, 75-95 \times 10-13, octosporis; sporidiis recte v. oblique monostichis, ellipsoideis, late rotundatis, unilocularibus, hyalinis, 11-15 \times 6-8; loculis conidiferis parvis, lenticularibus, dimidium folium occupantibus; conidiis filiformibus, unilocularibus, hyalinis, 13-17 \times 1.

Hab. in foliis *Andropogonis assimilis* (Graminaceae), Kumaon, Himalaya (INAYAT), Dehra Dun (E. J. BUTLER), *A. micranthi* Maymyo Burma, Indiae or. (BUTLER).

32. *Phyllachora fragesoana* Maire, Bull. Soc. N. H. dell'Afr. du Nord 5177
1917, p. 170, *Phyll. Bromi* var. *Andropogonis* Sacc., Ann. Myc. 12., 1914, p. 285 (non *Phyll. Andropogonis* Karst. et Har.). — Stroma-

tibus oblongis, 1000-1200 \times 160, loculis numerosis parum distinctis, 200 μ diam.; ascis 115-120 \times 11,5-12, paraphysatis, octosporis; sporidiis ellipsoideis utrinque rotundatis, 11-14 \times 9, saepius oblique monostichis, hyalinis.

Hab. in foliis *Andropogonis hirti* (Graminaceae), prope Sevilla, Hispania (FRAGOSO) et pr. Alger, Afr. bor. — Socia adest *Stagonospora* (Placosphaerina) *myriospora* Pat.

33. *Phyllachora andropogonicola* Speg., Mycet. Argent., Anal. Mus. Nac. 5178 Buenos Aires XXIII (1912) p. 90. — Stromatibus sparsis minutis, elongatis, 0,5-2 mm. long. 200-250 μ latis, erumpentibus, nigris, colliculosis, subcarbonaceis, contextu parenchymatico saepius indistincto; loculis in quoque stromate 5-10 seriatis, subglobosis, 170-180 μ diam., saepe confluentibus, astomist, albo-farctis; ascis cylindraceutis infra medium sensim attenuatis et breviter pedicellatis, 100-120 \times 15-18, paraphysibus filiformibus parum longioribus obvallatis; sporidiis plerumque oblique monostichis, ellipsoideo-rhomboides, utrinque acutissimis, non vel vix inaequilateris, grosse 1-guttatis, hyalinis, 20 \times 8.

Hab. in foliis vaginisque *Andropogonis saccharati* (Graminaceae), in pratis prope Bompland, Misiones, Argentina.

34. *Phyllachora Anthephorae* Sydow, Ann. Mycol. XIII, 1915, p. 39 et 5179 p. 439. — Stromata densiuscule sparsa, utrinque visibilia, saepe longitudinaliter seriata, elliptica, subopaca, minutissima, confluyendo usque 1-1,5 mm. longa, convexula, clypeo epidermali plerumque epiphylllo 25-30 μ crasso opaco, hyphis stromaticis in mesophyllo paucis; loculis approximatis, folii altitudinem subattingentibus, applanato-globosis, 150-200 μ latis, 140-170 μ altis, membrana 10-14 μ crassa; ascis cylindraceutis, copiose paraphysatis, 60-70 \times 10-14, octosporis; sporidiis oblique monostichis, ellipsoideis, continuis, hyalinis, 11-13 \times 7-9.

Hab. in foliis *Anthephorae hermaphroditae* (Graminaceae), Kingston, Hope Gardens, Jamaica (EUG. MAYOR).

35. *Phyllachora Anthistiriae* Racib. in Theiss. et Syd., Ann. Mycol. 13., 5180 1915, p. 439. — Stromatibus solitariis, rotundatis, in epiphylllo nigris in hypophyllo e brunneis nigris rotundatis et 0,6-1 mm. lat. v. ovoideis et tunc usque ad 2 mm long. in maculis elongato-ovoides brunneis rubro marginatis insidentibus; hyphis intercellularibus, in epiphylllo magis copiosis, plagas nigras efformantibus in quas 3-5 perithecia globoso-depressa insidentia; cavitare perithecii usque 200 μ lata, 100-150 μ alta; parietibus obscure brunneis v. nigris,

ostiolo punctiformi non prominenti; paraphysibus prominentibus; ascis cylindraceutis, apice depresso rotundatis, 70-80 \times 7-9, octosporis; sporidiis hyalinis, levibus, tenuiter tunicatis, elongato-ovoideis, 11-12 \times 4-5.

Hab. in foliis *Anthistiriae ciliatae* (Graminaceae), Buitenzorg, Java.

36. *Phyllachora striatula* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 5181 440. — Stromatibus in utraque pagina foliorum visibilibus, sparsis v. seriatis, linearibus 0,5-1 mm. long. 0,1-0,2 mm. latis, quandoque punctiformibus, opace nigris, prominentibus, uni v. paucilocularibus; clypeo epidermico, crasso, nigro, 20-40 μ cr., unilaterali; loculis totam crassitudinem fere occupantibus, 200-250 μ cr., parietibus lateralibus brunneis 10-15 μ cr.; ascis cylindraceuto-clavatis 70-100 \times 10-15, paraphysatis, octosporis; sporidiis monostichis v. subdistichis, ellipsoideis, utrinque obtusis, 1-locularibus, hyalinis intus aequae minuteque granuloso-farctis, 11-14 \times 7-8.

Hab. in foliis *Oxonopi semialati* (Graminaceae), Carolina, Transvaal (J. BUETT DAVY).

37. *Phyllachora caespiticia* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 5182 441, *Phyll. bonariensis* Speg. var. *tonkinensis* Roum., Rev. Mycol. 1891 p. 77 (nom. nud.), Fungi sel. exs. n. 5643, non *Phyll. tonkinensis* Sacc. — Stromatibus epiphyllis, plerumque arcte gregariis, ellipsoideis $\frac{1}{3}$ - $\frac{1}{2}$ mm. long. $\frac{1}{4}$ mm. latis, rotundato-prominentibus, nitidulis, in hypophyllo punctiformibus macula pallide flava circumdatis, unilocularibus; loculis depresso globoso-ellipsoideis 300-380 μ long. 200-250 μ latis 140-160 μ altis, supra et infra clypeo epidermico tectis (clypeo hypophyllo brevior et tenuior) lateraliter parietibus stromaticis destitutis; ascis paraphysatis, clavatis, breviter pedicellatis, 60-70 \times 11-14, octosporis; sporidiis monostichis v. distichis, elongato-ellipsoideis, hyalinis, unilocularibus, utrinque angustatis sed non acutatis, 12-15 \times 5-6.

Hab. in foliis *Bambusae* (Graminaceae), Tonkin, Cina (BALANSA).

38. *Phyllachora orbicula* Rehm, Ascomyc. Philipp. V, Leaflets of Phil. Botany, VI (1914) p. 2221. — Stromatibus maculis dilute flavidulis utrinque foliorum paginae innatis, in epiphyllis evolutis, sparsis, atris, orbicularibus, 0,5-0,8 mm. latis, glabris, vix conspicue papillulatis, loculis 1-3 globosis innatis; ascis clavatis, sessilibus, filiformi-paraphysatis, 60 \times 10; sporidiis distichis, oblongis, utrinque rotundatis, non guttatis, 10-12 \times 5-5,5.

Hab. in foliis *Bambusae* *Blumeanae*, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES). — *Ph. graminis* (Pers.) Fuck. stromatibus majoribus, ascis cylindraceis diversa. — Sec. Theiss. et Sydow, Ann. Myc. 13., 1915, p. 441: ascis 55-70 × 10-13, sporidiis ellipsoideis v. elongato-ellipsoideis, 12-16 × 5,5-6,5.

39. *Phyllachora Bambusae* (Syd. et Butl.) Syd. et Butl. in Th. et Syd., 5184
Ann. Mycol. 13., 1915, p. 441, *Metachora Bambusae* Syd. et Butl., l. c. p. 400. — Stromatibus in maculis fuscis oblongis v. linearibus indeterminatis insidentibus, ex utraque foliorum pagina plus minus globose v. semiglobose erumpentibus, $\frac{1}{2}$ - $\frac{1}{2}$ mm. diam., atris, carbonaceis, phyllachoroideis, intus unilocularibus, contextu minute parenchymatico; ascis cylindraceis 100-150 × 10-16, pedicellatis, octosporis, filiformiter paraphysatis; sporidiis di-tristichis, oblongo-cylindraceis, continuis, hyalinis, 18-32 × 4-5.

Hab. in foliis vivis v. languidis *Bambusae*, Kanouth Malabar, Indiae or. (E. J. BUTLER).

40. *Phyllachora malabarensis* Syd. et Butl., Ann. Mycol. IX, 1911, p. 5185
398; Theiss. et Syd. 13., 1915, p. 443. — Maculis nullis v. indeterminatis, flavidis; stromatibus epiphyllis, rarius etiam hypophyllis, innatis, plano-convexis, solitariis, oblongis, ellipticis v. sublinearibus, 0,5-1,5 mm. long. 0,5-1 mm. latis, atris, glabris, opacis, per aetatem subrimose dehiscentibus, contextu indistincto; loculis 4-8 in quoque stromate majusculis; ascis clavatis, apice obtusis, breviter pedicellatis, 70-100 × 17-26, octosporis; sporidiis oblongis v. fusoides, continuis, hyalinis, intus minute granulatis, utrinque obtusis, 27-35 × 9-14, distichis. Stromatibus spermogonicis plerumque minoribus; sporulis filiformibus, valde curvatis, plerumque falcatis, hyalinis, non septatis, nec guttulatis, 25-35 × 1,5-2.

Hab. in foliis *Bambusae* sp., Wynaad, Malabar, Indiae or. (E. J. BUTLER). — *Ph. Tjangkorreh* Rac. et *Ph. eximiae* Syd. affinis differt vero ascis minoribus sed sporis majoribus.

41. *Phyllachora sinensis* Sacc., Philipp. Journ. of Sc. Manila, P. I., 5186
1921, p. 600. — Stromatibus minutis, subcircularibus, amphigenis in maculis flavidis innatis, paucilocularibus, loculis epiphyllis non v. vix emergentibus; ascis cylindricis, praelongis, 190 × 9-11; sporidiis monostichis, fusoides, utrinque obtusatis, 28 × 9; hyalinis, faretis.

Hab. in foliis vivis *Bambusae* sp., Fukien, Foochow, Cina (SKVOETZOW). — *Phyll. eximiae* Syd. (in *Arundinaria*) affinis, differt imprimis ascis multo angustioribus.

42. *Phyllachora megastroma* Pat., Bull. Soc. Mycol. 1914, p. 345. — 5187

Stromatibus amphigenis, macula arida flava insidentibus, carbonaceo-coriaceis, atris, elongatis (1-15 mm. longis, 1-2 mm. latis), sulcis pluribus, linearibus notatis; peritheciis paucis (2-6) albifaretis, poro pertusis; ascis cylindraceis 90-140 \times 8-10, octosporis; paraphysibus numerosis, hyalinis, ramosis; sporidiis uniseriatis, ellipticis, hyalinis, 15-18 \times 6, crasse tunicatis, contentu viridulo, granuloso, vel 2-guttulatis.

Hab. parasitica in foliis *Bambusaceae* ejusdam, M^r Brès, Congo, Africae (BAUDON).

43. *Phyllachora graminis* (Pers.) Fuek. — Syll. II p. 602 fm. *Bambusae* 5188

Har. et Pat. in Bull. Mus. Hist. Nat. Paris 1911, p. 368. — Ascis 100 \times 60; sporidiis 12-14 \times 6.

Hab. in foliis *Bambusaceae*, Chari: Gribingui, Congo gallico. — Var. *Beckerae polystachiae* Bacc., F. Etiop. II n. 84, in Pirrotta, Ann. Bot. 1917. — Stromatibus ellipticis ad 0,5 mm. longis, amphigenis, solitariis rarius gregariis ac confluentibus, monocularibus, vel paucilocularibus, loculis 315 μ latis 180-200 μ altis; totius folii latitudinem occupantibus ob ostiolo prominulo papillatis; ascis paraphysatis (80-96 \times 8-9,5); paraphysibus fere duplo longioribus, guttulatis obvallatis; sporidiis ellipticis oblique monostichis (9-11 \times 6-7).

Hab. in *Beckera polystachia* Fr. (Graminaceae), Gondar, Ethiopia, Africa

44. *Phyllachora Blepharoneuri* Ch. E. Fairman, Mycologia 10., 1918, p. 5189

251. — Stromatibus follicolis utrinque visibilibus elongatis curvulis 1-3 mm. long. 1 mm. latis nervos elevantibus; loculis 2-10 v. ultra in quoque stromate, epistromate persistenti intus limitatis; ascis et paraphysibus illis *Ph. graminis* conformibus; sporidiis monostichis, ellipsoideis eguttulatis, hyalinis, 10 \times 6-7.

Hab. in foliis *Blepharoneuri tricholepididis* (Graminaceae), Ute Park Colfax C., 2200-2900 m. alt., New Mexico, Amer. bor. (P. C. STANDLEY).

45. *Phyllachora Centothecae* Sydow, Ann. Mycol. XIII, 1915, p. 39; 5190

Theiss. et Syd., l. c. 13., 1915, p. 446. — Stromatibus amphigenis, plerumque in greges plus minus elongatos (3-15 mm. longos) seriatiim dispositis, exiguis, rotundatis usque ellipticis, punctiformibus, $\frac{1}{5}$ - $\frac{1}{3}$ mm. longis, nitidulis, convexis, 1-loculigeris; loculis globulosis vel applanato-globosis, 130-200 μ diam., clypeo laterali 25-45 μ crasso opaco aterrimo; ascis cylindraceis, breviter stipi-

tatis, copiose paraphysatis, octosporis, $50-60 \times 9-11$; sporis ovatis, continuis, hyalinis, oblique monostichis usque distichis, utrinque rotundatis, $11-13 \times 5-7$.

Hab. in foliis *Centothecae lappaceae* (Graminaceae), Moulmein, Burma, Indiae (E. J. BUTLER).

46. *Phyllachora Dimeriae* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 447. — 5191

Stromatibus amphigenis, sparsis, oblongis v. breviter striaeformibus $0,5-1,5$ mm. long. $0,5$ mm. latis, nitide nigris, prominulis non confluentibus; clypeo uno latere v. utrinque evoluta, epidermoideo, opaco, $20-30 \mu$ cr.; loculis plerumque parvis, $140-190 \mu$ diam., rotundatis; ascis cylindraceis copiose paraphysatis, octosporis, $50-60 \times 11-14$; sporidiis plerumque monostichis, ovoideis v. oblongo-ellipsoideis, utrinque rotundatis, unilocularibus, hyalinis, $10-14 \times 7-8$.

Hab. in foliis *Dimeriae stipaeformis* (Graminaceae), Mt. Konomine prov. Tosa, Japonia (T. JOSHINAGA)

47. *Phyllachora atronitens* Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5192

lipp. Botany VI (1914) p. 2221. — Stromatibus gregariis, innatis, discoideis vel oblongatis, corticem atronitentem elevantibus et longitudinaliter disrumpentibus, $1-3$ mm. longis et latis, nigris, ostioliis minimis conspicuis; ascis fusiformibus, octosporis, paraphysatis, $45-48 \times 9$; sporidiis distichis, fusiformibus, rectis, continuis, guttatis. hyalinis, $12 \times 3-3,5$.

Hab. in *Donace cannaefolio* emortuo (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. RAIMUNDO). — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 564, probabiliter eadem est ac *Phyll. atrofigurans* Rehm (cnfr. n. 48), et e *Phyllachoraceis* removenda. Ad *Olypeosphaeriaceas*?

48. *Phyllachora atrofigurans* Rehm. Ascom. Philipp. I, in Philipp. Journ. 5193

of Sci. VIII (1913) p. 183. — Stromatibus epidermidi innatis, nigris, planis, $0,3-1$ mm. diam. orbicularibus, solitariis, dein in maculis ellipticis vel orbicularibus, figuratis, usque ad 1 cm. diam., longitudinaliter vel quadratim confluentibus; peritheciis innatis, globulosis. stroma minutissime papillulatum conoideo-sublevantibus, 120μ diam.; ascis fusiformibus, sessilibus, 35×10 , octosporis; sporidiis $2-3$ -stichis, oblongis vel clavatis, 1 -cellularibus, hyalinis, $8-9 \times 2,5-3$.

Hab. in culmis *Donacis cannaeformis* (Graminaceae), atro-marmoratis, Luzon, prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Cnfr. *Ph. atronitens*, n. 47.

49. *Phyllachora donacina* Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5194

lipp. Botany, VI (1914) p. 2222. — *Stromatibus* laxe gregariis, innatis, ellipsoideis vel orbicularibus, convexulis, atris, plerumque parallele seriatis, 1-3 mm longis, 1 mm. latis, intus nigris, denique longitudinaliter apertis; loculis circ. 8, monostichis, arcute confertis, globulosis, 120 μ circ. latis; ascis clavatis, apophysatis, 40-50 \times 6; sporidiis distichis, fusoides, rectis, utrinque acutatis, continuis, hyalinis, 15-18 \times 2,5-3.

Hab. in culmo *Donacis cannaeformis* (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES). — Species ulterius inquirenda, sec. Th. et Syd., Ann. Mycol. 13., 1915, p. 448.

50. *Phyllachora Eriochloae* Speg., Syll. XXII p. 423 — var. *columbiensis* 5195

Theiss. et Syd., Ann. Mycol. 13., 1915, p. 448. — *Stromatibus* elongato-ellipsoideis, usque 0,8 \times 0,28-0,32 mm., plerumque parvis et seriatim confluentibus, utrinque visibilibus; clypeo in utrinque epidermide; loculis e globosis depressis, 240-280 μ latis 100-140 μ altis, parietibus tenuibus praeditis; ascis cylindraceutis, paraphysatis, p. sp. 70-80 \times 9; sporidiis plerumque monostichis, elongato-angustatis, 13-14 \times 4-5, v. quandoque 11 \times 5,5.

Hab. in foliis *Eriochloae punctatae* (Graminaceae), Medellin Columbia, Amer. austr. (E. MAYOR).

51. *Phyllachora Imperatae* Syd., Ann. Mycol. 15., 1917, p. 226. — *Stro-* 5196

mata in utraque foliorum pagina visibilia, sparsa vel gregaria, minuta, oblonga, 1-2 mm. longa; loculi 5-10 in quoque stromate, applanati, 300-350 μ lati, 80-100 μ alti, clypeo amphigeno 20-30 μ crasso; ascis cylindraceutis, 70-80 \times 12-14, octospori, paraphysati; sporae oblique monostichae vel distichae, anguste ellipsoideae vel oblongo-ellipsoideae, continuae, hyalinae, 12-17 \times 5-6.

Hab. in foliis *Imperatae cylindricae* (Graminaceae), Benguet, Luzon, Ins. Philipp. (E. D. MERRILL) et *Imperatae* spec., Los Baños (C. F. BAKER).

52. *Phyllachora exigua* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 449. — 5197

Stromatibus amphigenis, sparsis, minutis, punctiformibus 200-350 μ diam., rotundatis, parum nitidis prominentibusque, 1-v. 2-3-locularibus; clypeo epidermoideo in utraque parte evoluta, 18-24 μ cr., opaco; loculis rotundatis, 140-170 μ diam. parietibus brunneis 10-14 μ cr. praeditis; ascis cylindraceutis, copiose paraphysatis, octosporis. pedicellatis, p. sp. 45-58 \times 10-12; sporidiis monostichis, ovoideis v. ellipsoideis, utrinque obtusis, unilocularibus, hyalinis, 8-11 \times 6-8.

Hab. in foliis Isachnes australis (Graminaceæ), Akatsuchi-toge prov. Tosa, Japonia (T. JOSHINAGA).

53. *Phyllachora Tehonis* Trott., nom. n. — Syn. *Phyllachora Ischaemi* L.R. 5198
Tehon, Bot. Gazette 67., 1919, p. 507, tab. XVIII fig. 2-3, nec Syd. — Stromatibus epiphyllis rotundatis confertis saepe confluentibus mesophyllo innatis, 0,75-1,25 mm. diam.; clypeo 24-26 μ cr.; loculis duobus v. plurimis in quoque stromate, e sphaeroideis ampullaceis, 125-145 μ diam.; ascis e cylindraceutis clavatis 105-150 \times 10-12, octosporis; sporidiis hyalinis sphaeroideis monostichis 8 μ diam., uniguttulatis; paraphysibus filiformibus.

Hab. in foliis Ischaemi latifolii (Graminaceæ), St. Pierre Martinica, Porto Rico.

54. *Phyllachora lachaemi* Sydow, Ann. Mycol. 13., 1915, p. 40 et p. 5199
449. — Stromatibus amphigenis, sparsis vel saepissime seriatim dispositis, minutis, punctiformibus, ellipticis, $\frac{1}{2}$, $\frac{1}{2}$ mm. longis, confluyendo 1 mm. longis, convexis, nitidulis, 1-loculigeris, confluyendo pauciloculigeris; loculis folium subpenetrantibus, applanato-globosis, 180-220 μ diam., clypeo laterali vel unilaterali, opaco, 20-30 μ crasso; ascis cylindraceutis clavatis, copiose paraphysatis, breviter stipitatis, octosporis, 45-60 \times 12-18; sporidiis irregulariter distichis vel etiam conglobatis, ovato-ellipsoideis, utrinque obtusis, continuis, hyalinis, 12-15 \times 5-6,5.

Hab. in foliis Ischaemi laxi (Graminaceæ), Bilin, Burma, Indiae (E. J. BUTLER).

55. *Phyllachora Miscanthi* Syd., Ann. Mycol. 15., 1917, p. 227. — Stro- 5200
mata in utraque foliorum pagina visibilia, sparsa, elliptica, 1,5-3 mm. longa, nitidula plurilocularia, clypeo amphigeno, firmo, aterimo, 30-35 μ crasso, ex hyphis brunneolis 3-3,5 μ latis contexta; loculi 170-300 μ lati; asci cylindraceutis clavatis, stipitati, paraphysati, 160-180 \times 18-22, octospori; sporae monostichae, late ellipsoideae, continuae, rotundatae, hyalinae, 18-24 \times 12-14.

Hab. in foliis Miscanthi sinensis (Graminaceæ), Benguet, Luzon, Ins. Philipp. (E. D. MERRILL).

56. *Phyllachora vulgata* Theiss. et Syd., Ann. Mycol. 13., Barthol. Fungi 5201
Columb. n. 2249, 1915 p. 450. — Stromatibus totam crassitudinem folii occupantibus, elongatis, 1-2 mm. long. 0,5-1 mm. latis, crebre sparsis v. seriatim, non vel vix confluentibus, prominentibus, opace nigris, loculis 1-3 seriatim praeditis; clypeo utrinque fortiter evoluto, 20-40 μ cr., compacto, nigro; loculis confertis, totam crassitudinem stromatis occupantibus prominentibusque, globosis, 160-

220 μ latis 150-190 μ altis, parietibus lateralibus bene evolutis, 10-12 μ cr., brunneis; ascis cylindraceis, breviter pedicellatis, copiose paraphysatis, 60-75 \times 8-10, octosporis; sporidiis monostichis, ellipsoideis, hyalinis, unilocularibus, 9-11 \times 4,5-5,5.

Hab. in foliis Muehlenbergiae silvaticae, racemosae, diffusae, foliosae, soboliferae (Graminaeae), in America bor frequens. — *Ph. graminis* proxima sed stromatibus minutis praecipue diversa.

57. *Phyllachora Ophiuri* Syd., Ann. Mycol., 15., 1917, p. 227. — Stro- 5202
mata amphigena, plerumque hypophylla seriatim disposita, elliptica vel oblonga 0,5-1 mm. longa, confluyendo 2 mm. longa, convexa, nitidula, plurilocularia, clypeo epidermali firmo, aterrimo, opaco, 25-30 μ crasso; loculi 250-500 μ lati, 150-300 μ alti, parietibus lateralibus brunneolis 10-12 μ crassis. ex hyphis tenuissimis compositis; hyphae mycelii totam folii crassitudinem occupantes, flavido-brunneolae, 2,5-3,5 μ cr.; ascis clavati copiose paraphysati, 80-90 \times 15-18, octospori; sporae oblique monostichae usque subdistichae, ovatae vel ellipsoideae, utrinque rotundatae, continuae, hyalinae, 12-13 \times 9-10.

Hab. in foliis *Ophiuri corymbosi* (Graminaeae), prov. Rizal, Ins. Philipp. (M. RAMOS).

58. *Phyllachora Oryzopsidis* Theiss. et Syd., Ann. Mycol. 13., 1915, 5203
p. 451 Barthol., Fungi Columb. 3536; Rehm, Ascom. 1916 (sub *Ph. graminis*). — Stromatibus epiphyllis, in hypophyllo non v. vix visibilibus, sparsis v. laxe seriatis, ex ellipsoideis breviter linearibus, $\frac{1}{2}$.-1 mm. long. $\frac{1}{3}$ mm. latis, parum prominentibus, nigris, subopacis, non confluentibus; clypeo epidermoideo, 20-25 μ cr., nigro-brunneo, parum incrassato, limitato, clypeo basilari non v. vix evoluta; loculis 1-2 seriatis e depresso globosis lenticularibus 150-230 μ latis 90-140 μ altis, parietibus lateralibus tenuibus, brunneolis, 8-10 μ cr.; ascis cylindraceis, 70-95 \times 9-10, paraphysatis, breviter pedicellatis, octosporis; sporidiis monostichis, ex ellipsoideis oblongis, utrinque obtusis rotundatis, unilocularibus, hyalinis, 11-14 \times 5-6,5.

Hab. in foliis *Oryzopsidis asperifoliae* (Graminaeae), London Ontario, Canada, Amer. bor. (DEARNESS). — A *Ph. graminis* fabrica stromatis loculorum diversa.

59. *Phyllachora congruens* Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5204
lipp. Botany, VI (1914) p. 2220. — Stromatibus foliis late flavidule decoloratis innatis, sparsis, in utraque folii pagina conspicuis, atris, irregulariter discoideis, interdum striatulis 100-200 μ diam., loculos

1-3 vix ostiolatos includentibus; ascis clavatis, rarissime cylindraceis, 40-50 \times 10-12, paraphysibus filiformibus obvallatis; sporidiis distichis, subelavatis, utrinque rotundatis, continuis, hyalinis, eguttulatis, 12 \times 4-5.

Hab. in foliis *Panicicarinati* (Graminaceæ), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. RAIMUNDO). — Sec. Theiss. et Sydow, Ann. Myc. 13., 1915, p. 451; ascis 45-65 \times 10-14, paraphysibus apice saepe clavulatis, sporidiis distichis, 11-13 \times 4-5.

60. *Phyllachora Raciborskii* Theiss. et Syd., Ann. Mycol. 13., 1915, 5205 p. 453. — Stromatibus amphigenis, plus minus aequaliter sparsis v. hinc inde paucis approximatis v. etiam cencentrice dispositis, parvis, ovoideis, 0,2-0,4 mm. long. non v. raro confluentibus, prominulis, uni-v. 2-3 locularibus; clypeo in utroque latere parum evoluto, 20 μ circ. crasso; loculis depressis, 60-120 μ altis et usque ad 220 μ latis totam crassitudinem foliorum occupantibus; ascis cylindraceis, octosporis, copiose paraphysatis, 65-80 \times 13-15; sporidiis plerumque distichis, ellipsoideo-fusoides, utrinque angustatis sed obtuse rotundatis, unilocularibus, hyalinis, 14-18 \times 6-7,5.

Hab. in foliis *Panicinepalensis* (Graminaceæ), Salak, Java.

61. *Phyllachora Vanderystii* Theiss. et Syd., Ann. Mycol. 13., 1915, 5206 p. 455. — Stromatibus densiuscule sparsis, utrinque visibilibus, saepius longitudinaliter seriatis, ellipticis, nigris, subnitentibus, usque 1 mm. longis, convexulis; clypeo epidermali in utraque folii pagina 25-30 μ cr., opacis, hyphis stromaticis in mesophyllo parvis; loculis approximatis, altitudine folii, applanato-ellipsoideis, 500 μ long. 250-300 μ latis 160-200 μ altis, membrana brunnea (hyphis e stromate clypeali oriundis concentrice circumpositis) 8-10 μ crassis; ascis cylindraceis, paraphysatis, breviter pedicellatis, 65-75 \times 12-16; sporidiis 1-2-stichis, ellipsoideis v. oblongis, hyalinis, continuis, 13-15 \times 5,5-6,5.

Hab. in foliis *Paniciplicati* (Graminaceæ), Nyango-Tal. Congo, Africa (H. VANDERYST).

62. *Phyllachora sanguinolenta* Theiss. et Syd., Ann. Mycol. 13., 1915, 5207 p. 455. — Stromatibus amphigenis arcte gregariis, rotundatis v. ellipsoideis, $\frac{1}{3}$ - $\frac{3}{4}$ mm. prominenter convexis, nitidulis, raro confluentibus, in maculis indistinctis insidentibus; clypeo epidermali 20 μ cr., amphigeno v. unilaterali; loculis ellipsoideis v. rotundatis et 240 μ diam., parietibus tenuibus brunneis; ascis cylindraceis, paraphysatis, breviter pedicellatis, 60-70 \times 10-14, sporidiis monosti-

chis, quandoque distichis, ellipsoideis, rotundatis, hyalinis, unilocularibus, $13,5 \times 7-8$.

Hab. in foliis *Panici sanguinolenti* (Graminaceæ), Nyangotal, Congo (H. VANDERYST). — Var. *microspora* Theiss. et Syd. l. c., stromatibus sparsis convexis, nitidulis, ellipsoideis, rotundatis, $0,5-1$ mm. long., sporidiis ellipsoideis, 8×5 . — *Hab.* in Graminaceæ ignota, Nyango, Congo (H. VANDERYST).

63. *Phyllachora Panici-sulcati* (P. Henn.) Theiss. et Syd., Ann. Mycol. 5208 13., 1915 p. 453, *Phyll. graminis* (Pers.) Fuck. var. *Panici-sulcati* P. Henn., Hedwigia 41., 1902, p. (103). — *Phyll. seriatae* proxima, a qua differt stromatibus parum majoribus oblongis v. ellipsoideis $1-1,5$ mm. longis; sporidiis plerumque latoribus obtusis, $10-15 \times 7-9$.

Hab. in foliis *Panici sulcati* (Graminaceæ), Costa Rica.

64. *Phyllachora seriata* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 453. — 5209

Stromatibus secus nervos in maculis flavescentibus plus minus distincte seriatis, in utraque pagina foliorum visibilibus, parvis, non vel vix confluentibus, ellipsoideis v. oblongis, usque $\frac{1}{2}$ mm. long., nitide nigris, plerumque unilocularibus; clypeo in utroque latere evoluto, loculos parum crassiore, $15-20 \mu$ cr.; loculis $150-180 \mu$ altis $200-280 \mu$ latis, totum folium amplectentibus; ascis copiose paraphysatis, cylindraceo-clavatis, pedicellatis, $60-80 \times 10-14$, octosporis; sporidiis monostichis v. distichis, ellipsoideo-fusoideis, utrinque angustatis, apice obtusis, unilocularibus, hyalinis, $13-15 \times 5,5-6,5$.

Hab. in foliis *Panici* sp. (Graminaceæ), Dumaguete prov. Negros, Ins. Philippin. (ELMER).

65. *Phyllachora quadrospora* L. R. Tehon, Bot. Gazette 67., 1919, p. 5210

507, tab. XVIII fig 4. — Stromate variabili plerumque e ovoideo lineari, $0,5-1 \times 0,5$ mm., clypeo epidermali amphigeno plerumque biloculari; loculis subsphaeroideis, $115-125 \mu$ diam.; ascis cylindraceis breviter stipitatis, $100-110 \times 10-12$, 4-sporis, paraphysatis; sporidiis hyalinis, granulosis, 2-guttulatis, ellipsoideis, $20-22 \times 8$.

Hab. in foliis *Paspali glabri* (Graminaceæ), Maricao, P. conjugati, Tanama River, Porto Rico.

66. *Phyllachora Winkleri* P. et H. Syd., Ann. Mycol. X, 1912, p. 80. — 5211

Theiss. et Syd., Ann. Myc. 13., 1915, p. 456. — Stromatibus innatis, utrinque prominulis, epidermide nigrefacta adnata tectis, aterimis, ellipticis usque oblongis, saepe confluentibus, $1-3$ mm. diam., ob loculos numerosos plus minusve prominulos rugulosos; ascis cylindraceis, octosporis, breviter pedicellatis, $80-120 \times 11-16$; sporidiis monostichis, globosis, subglobosis v. late ellipsoideis, continuis,

hyalinis, 11-17 \times 9-13: paraphysibus numerosis, filiformibus, ascos superantibus; loculis junioribus, spermatiis filiformibus, varie curvis, 15-20 \times 1, hyalinis instructis.

Hab. in foliis *Paspali scrobiculati* (Graminaceæ), Muanza Lac, Victoria, Africa or. (B. SCHRÖDER et H. WINKLER). — A *Ph. graminis* sporis majoribus plerumque globosis diversa.

67. *Phyllachora paspalicola* P. Henn., Hedw. vol. 48 (1908) p. 106. — 5212
Rehm, Ascom. 1785; Theiss. et Syd., Ann. Myc. 13., 1915, p. 456. — Maculis effusis, fuscidulis; stromatibus amphididymis, sparsis, rotundato-pulvinatis, minutis, atris, ca. 300 μ diam.; peritheciis immersis, globulosis; ascis cylindraceo-subclavatis, obtusis, octosporis, paraphysatis, 70-90 \times 8-10; sporidiis monostichis, ellipsoideis, utrinque rotundatis, hyalinis, 6-8 \times 4,5-6.

Hab. in foliis *Paspali* sp. (Graminaceæ), hort. botan. Goeldi, Pará, Brasilia (BAKER). — A *Ph. graminis* Fuck. etc. diversa.

68. *Phyllachora Penniseti* Sydow, Ann. Mycol. XIII, 1915, p. 39. — 5213
Theiss. et Syd., Ann. Myc. 13., 1915, p. 457. — Stromatibus in utraque foliorum pagina conspicuis, sparsis vel aggregatis et seriatis dispositis, rotundatis vel oblongis, 0,5-1 mm. longis, subinde confluyendo majoribus, opace atris, intus plurilocularibus, loculis irregularibus majusculis, 280-350 μ longis, 200-300 μ altis, clypeo bilaterali 15-25 μ crasso, parietibus lateralibus 8-10 μ latis brunneolis; stylosporibus rectis vel flexuosis, continuis, filiformibus, hyalinis, 18-35 \times 1; ascis clavatis, ad apicem rotundatis, 70-95 \times 20-26, paraphysatis, 8-sporis; sporidiis distichis, late ellipsoideis, utrinque late rotundatis, continuis, hyalinis, intus guttulatis, 17-24 \times 11-18.

Hab. in foliis *Penniseti Benthani* Steud. (Graminaceæ), Lazaret St. Jean, Congo belgica (H. VANDERYST).

69. *Phyllachora Bromi* Fuck. — Syll. II, 608 — fm. *Poa-nemoralis* Gz. 5214
Frag. in Trabajos Mus. Nac. Ciencias Nat., ser. Botan., n. 7 (1914) p. 32. — Stromatibus oblongis vel irregularibus 1-2 \times 0,5-1 mm.; loculis paucis; ascis 90-100 \times 11-12, paraphysatis, octosporis; sporidiis ellipsoideis, oblique vel irregulariter monostichis, hyalinis, 10-12 \times 5,5-5, guttulis 2-3 praeditis.

Hab. in foliis *Poa-nemoralis* var. *vulgaris* (Graminaceæ), prope Cercedilla in montibus Guadarramae, Hispania.

70. *Phyllachora Pogonatheri* Sydow., Ann. Mycol. XIII, 1915, p. 40. — 5215
Theiss. et Syd., Ann. Myc. 13., 1915, p. 458. — Stromatibus amphigenis, solitariis, haud seriatis, minutis, rotundatis, punctiformibus, 0,25-0,5 mm. diam., vix nitentibus, 1-3 loculigeris, planiuscu-

lis; loculis matricem fere penetrantibus, applanatis, 200-300 μ longis 170-220 μ altis, clypeo laterali, opaco, atro, 20-35 μ crasso, membrana laterali multo tenuiore ca. 10 μ crassa brunneola; ascis cylindraceis, breviter stipitatis, octosporis, paraphysatis, 60-80 \times 10-14; sporis plerumque 1-stichis vel oblique 1-stichis, subinde distichis, ellipsoideis, utrinque obtusis, continuis, hyalinis, 12 \times 5-6.

Hab. in foliis *Pogonatheri saccharoides* (Graminaeae), Kumaon Himalaya, Indiae (INAYAT com. E. J. BUTLER).

71. *Phyllachora leptotheca* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 5216 458. — Stomatibus amphigenis folium decoloratum perforantibus, plerumque aequae distributis, parvis, rotundatis, $\frac{1}{3}$ - $\frac{3}{4}$ mm. diam., utrinque prominulis, nitidulis, pancilocularibus; clypeo in utraque folii pagina, epidermali, opaco, 20-30 μ cr.; loculis rotundatis, 130-150 μ diam., parietibus brunneis 10-12 μ cr.; ascis cylindraceis, pedicellatis, copiose paraphysatis, 55-70 \times 4,5-6, octosporis; sporidiis monostichis, ellipsoideis, plerumque utrinque acutiusculis, unilocularibus, hyalinis, 8-10 \times 4-4,5.

Hab. in foliis *Polliniae imberbis* (Graminaeae), Tochimura, Tosa, Japonia (T. JOSHINAGA).

72. *Phyllachora Polypogonis* Theiss. et Syd., Ann. Mycol. 13., 1915, 5217 p. 458. — Stomatibus amphigenis, oblongis v. breviter linearibus, $\frac{1}{3}$ -1 mm. long. confluyendo usque 2 mm. long., parvis $\frac{1}{3}$ -1 mm. latis, opacis, sparsis v. ordinate distributis, pancilocularibus; clypeo amphigeno epidermoidali, opaco, 20-30 μ cr.; loculis depresso rotundatis, totam crassitudinem folii occupantibus, 170-250 μ latis, 140-180 μ altis parietibus brunneis 10 μ cr.; ascis cylindraceis, breviter pedicellatis, copiose paraphysatis, octosporis, 55-70 \times 9-12; sporidiis monostichis, ovoideis, rotundatis, unilocularibus, hyalinis, 9-11 \times 6,5-8.

Hab. in foliis *Polypogonis criniti* (Graminaeae), Concepcion, Chile (F. W. NEGER).

73. *Phyllachora Rottboelliae* Syd. et Butl., Ann. Mycol. IX, 1911, p. 5218 400. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 458. — Stomatibus innatis, amphigenis, oblongis v. linearibus, saepe confluentibus, usque $\frac{1}{2}$ 1 cm. longis, atris; loculis pluribus, prominulis, majusculis; ascis cylindraceis, copiose paraphysatis, 65-80 \times 10-14, octosporis; sporidiis ellipsoideis, recte v. oblique monostichis, utrinque rotundatis, hyalinis, continuis, plasmate saepe bipartito, 11-17 \times 6,5-8.

Hab. in foliis *Rottboelliae exaltatae* (Graminaeae),

The Droog Nilgiri Hills, Indiae or. (E. J. BUTLER), et Luzon, Ins. Philipp. — A *Ph. graminis* differt praecipue stromatibus sporidiisque majoribus.

74. *Phyllachora Sacchari-spontanei* Syd., Enum. Philipp. Fungi I, in 5219 Philipp. Journ. of Sci. VIII (1913) p. 279. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 459. — Stromatibus amphigenis, in utraque foliorum pagina conspicuis, maculis flavido-pallescentibus saepe rufovel sanguineo marginatis insidentibus, saepe etiam sine maculis, sparsis vel paucis laxè seriatim dispositis, oblongis, 0,5-1,75 mm. longis, 330-750 μ latis, carbonaceis, subopacis; loculis seriatim dispositis, minutis; ascis clavatis, subsessilibus vel breviter stipitatis, 75-100 \times 18-22, filiformi-paraphysatis; sporidiis distichis, fusiformibus, utrinque leniter attenuatis, continuis, hyalinis, intus minute guttulatis, 22-27 \times 7,5-8,5; stylosporibus simul praesentibus, breviter filiformibus, rectis vel leniter curvulis, hyalinis, 16-22 \times 0,75-1.

Hab. in foliis *Sacchari spontanei* (Graminaceae), Luzon, prope Manila, Ins. Philipp. — Cum *Ph. Sacchari* P. Henn. in Saccharo officinarum saepe confusa, sed ab ea sporidiis alienis semper dignoscenda.

75. *Phyllachora Evansii* P. et H. Syd., Ann. Mycol. X, 1912, p. 40. — 5220 Theiss. et Syd., Ann. Mycol. 13., 1915, p. 459. — Stromatibus amphigenis, sparsis v. seriatim dispositis, oblongis, 0,5-1 mm. long., $1\frac{1}{2}$ mm. latis, atris glabris, haud nitentibus, intus paucilocularibus, loculis irregularibus; ascis cylindraceis v. cylindraceo-clavatis, apice rotundatis, octosporis, 70-120 \times 7-12; paraphysibus filiformibus, numerosissimis; sporidiis monostichis usque subdistichis, ellipsoideis usque oblongis, plerumque utrinque rotundatis, subinde etiam basi leniter productis, rectis, hyalinis, 14-18 \times 6-8, contentu spurie granulato-striato; pycnidiosporibus simul praesentibus varie curvis saepe falcatis, hyalinis, 15-25 \times 1.

Hab. in foliis *Setariae sulcatae* (Graminaceae), Barberton, Transvaal (J. BURTT DAVY). *Phyll. setariaecola* Speg. videtur diversa.

76. *Phyllachora Engelhardtiae* Rac. in Theiss. et Syd. Ann. Mycol. 13., 5221 1915, p. 469. — Stromatibus rotundatis opacis usque 1 mm. latis, solitariis v. paucis aggregatis in maculis flavescentibus 0,5-1 cm. latis insidentibus et folium crassum hypertroficum plus minus efficientibus; loculis perithecialibus 1-5 depresso-lenticularibus, quandoque fortiter prominentibus; parietibus stromati subconformibus; ostiolo hypophyllo, breviter papilliformi, flavidulo, demum colla-

bescenti; peritheciis 150-200 μ altis, 170-590 μ latis; ascis brevissimis, cylindræo-clavatis, apice late rotundatis, singulis ovoideis latoribus 36-42 \times 15-20, octosporis; sporidiis unilocularibus, hyalinis, levibus, elongato-ovoides, 12-14 \times 4-5.

Hab. in foliis *Engelhardtiae* sp. (Juglandaceae), Salak, Java (RACIBORSKI).

77. *Phyllachora cantonensis* Sydow, Ann. Mycol. 17., 1919, p. 141. — 5222

Maculae utrinque visibiles, usque 1 cm. latae, flavae vel ochraceo-flavae, indeterminatae; stromata plura (3-10) in quaque macula irregulariter aggregata, in utraque foliorum pagina visibilia, 0,5-1 mm. diam., 1-pauci-locularia; loculi totam folii crassitudinem occupantes, 500-700 μ lati, 350-500 μ alti, clypeo 25-40 μ crasso; asci clavati, 65-85 \times 10-16, octospori, copiose paraphysati; sporae plerumque irregulariter monostichae, anguste ellipsoideae vel oblongae, continuae, hyalinae utrinque obtusae, 12-14 \times 5-7.

Hab. in foliis *Litsea glutinosae* (Lauraceae); pr. Canton, Kwangtung, prov. Sinarum (A. O. REINKING).

78. *Phyllachora Nectandrae* F. L. Stevens et N. Dalby, Bot. Gazette 5223

68., 1919, p. 57, tab. fig. 23-24. — Maculis rotundatis v. irregularibus, brunneis, stromata circumdantibus, utrinque prominentibus; stromatibus epiphyllis nigris, nitidis, 1-4 mm. diam. parum elevatis, sparsis v. raro confluentibus; loculis singulis v. paucis, subrotundatis, in mesophyllo nidulantibus, 225-500 μ latis 300 μ altis, pariete infra tenui; clypeo nigro 40-50 μ crasso, lateraliter expanso; paraphysibus copiosis filiformibus; ascis cylindræis, octosporis, 108 \times 10; sporidiis oblongis 14 \times 5.

Hab. in foliis *Nectandrae patentis* (Lauraceae), Maricao, Porto Rico. — A *Ph. nectandricola* Speg. praecipue differt paraphysibus praesentibus.

79. *Phyllachora ocoteicola* F. L. Stevens et N. Dalby, Bot. Gazette 68., 5224

1919, p. 57, tab. fig. 25-26. — Maculis amphigenis, copiosis, angulosis, 2-4 mm. diam., supra nitide nigris infra pallidioribus, ob loculos rugulosos; clypeo epidermali, utrinque visibilibus, depressis, circ. 17 μ cr.; stromatibus in mesophyllo evolutis; loculis copiosis, in mesophyllo nidulantibus, intus 156-170 μ altis 200-235 μ latis, parietibus hyalinis tennibus; ascis numerosis octosporis; sporidiis e oblongis cylindræis, 54 \times 17, uno apice parum acutatis; paraphysibus numerosis, filiformibus, curvulis.

Hab. in foliis *Ocotea leucoxylonis* (Lauraceae), Mte. Alegrillo, Mte. de Oro, Maricao, Porto Rico. — A *Ph. Ocoteae* P.

Henn. caracteribus plurimis diversa.

80. *Phyllachora uberata* Sacc., Ann. Mycol. XI, 1913, p. 16. — Stroma- 5225
tibus laxè gregariis, hemisphaericis, protuberantibus, 1-1,5 mm. lat.,
piceis, nitidissimis, basi innatis, in pag. inferiore foliorum non vi-
sibilibus, superficie obtuse parce inaequaliter papillatis, contextu
carbonaceo indistincte celluloso basi subdeficiente donatis, intus
griseo-pallidis, 3-6-locellatis, loculis amplis cavis v. ob vetustatem
byssò albo faretis, 300-400 μ diam.; ascis. jam absorptis.

Hab. in foliis emortuis v. languidis *Persaeae* spec. (Lauraceae),
in Mexico (BONANSEA). — Etsi fructificatio ignota, species ob stro-
mata majuscula, protuberantia, atro-nitida, loculosque valde amplos
distingui meretur. — Sec. Theiss. et Sydow, Ann. Mycol. 13., 1915,
p. 576 a *Phyllachora* removenda.

81. *Phyllachora phoebicola* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5226
Buenos Aires XXIII (1912) p. 91 — Stromatibus solitariis vel ra-
rius 2-3 laxè gregariis, saepissime hypophyllis, semilenticularibus,
parvis, nitidulis, areola angusta atra cinctis, 1-2 loculigeris; loculis
e mutua pressione angulatis, quandoque confluentibus; ascis sub-
cylindræis, apice subtruncato-rotundatis, basi leniter cuneatis,
crassè breviterque pedicellatis, 120-130 \times 10-15, parce filiformi-pa-
raphysatis; sporidiis oblique monostichis, ellipsoideis, utrinque acute
rotundatis, non vel grosse 1-guttatis, hyalinis, 16-22 \times 8-10.

Hab. in foliis vivis *Phoebis porphyriae* (Lauraceae), in
silvis prope Calilegua, Argentina.

82. *Phyllachora disseminata* Syd., Ann. Mycol. 14., 1916, p. 82. — Stro- 5227
matibus in utraque foliorum pagina visibilibus, per totam folii su-
perficiem aequaliter sparsis, minutis, rotundatis 0,5-0,75 mm. diam.,
maculis minutis ochraceis parum visibilibus insidentibus, haud con-
fluentibus, in epiphylo planis, in hypophyllo leniter convexis, attis,
opacis; clypeo amphigeno, epidermali, opaco, 20-30 μ crasso, leniter
expanso; loculis plerumque singulis in quoque stromate, mesophyl-
lum totum occupantibus, applanato-globosis vel sublenticularibus,
180-250 μ latis, 150-170 μ altis, pariete tenui brunneo; ascis cylin-
dræis, breviter stipitatis, paraphysatis, 60-80 \times 10-14, octosporis;
sporidiis recte vel oblique monostichis ellipsoideo-oblongis, utrinque
plerumque obtusis, continuis, hyalinis, 12-14 \times 6-7.

Hab. in foliis *Lauraceae*, Seringal S. Francisco, Rio Acre
Brasilia (E. ULE).

83. *Phyllachora nervicida* Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. 5228
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 128. — Stromata amphy-

gena nervationibus tantum innata, 10-20 mm. long. 2-2,5 mm. diam., illas leniter tumefacientia, atra, levia, loculis periphaericis parvis constipatis astomis; ascis cylindraceis apice rotundatis crasseque tunicatis deorsum modice attenuato-pedicellatis, octosporis paraphysatis, 200 × 14; sporae recte monostichae elliptico-subcylindraceae, primo guttulae hyalinae laeves serius 2-blastes dense minuteque papilloso-rugulosae, roseo-fumosae, 22-26 × 11-13. An melius *Phaeodothis* species?

Hab. ad folia viva Lauraceae cujusdam, prope Apiaby, Brasilia (J. PUIGGARI).

84. *Phyllachora uleana* (Rehm), *Physalospora perversa* Rehm var. *uleana* 5229
Rehm, Hedwigia 40., 1901, p. 113; Syll. XVI p. 460. — Syn. *Phyll. accedens* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 478 nom. nov.

85. *Phyllachora indica* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 488. — 5230
Stromatibus amphigenis, opace nigris, depressis, rotundatis, 1-2,5 mm. latis, superficie subpulveraceis; loculis bistratis, depresso globosis 300-350 μ latis 180-220 μ altis; ascis paraphysatis, clavatis, 80-90 × 16-20; sporidiis distichis, hyalinis, unilocularibus, elongato-ellipsoideis, utrinque obtuse rotundatis, 18-20 × 7-8, rectis v. subinaequilateris.

Hab. in foliis Acaciae penninerviae (Leguminosae), Indiae.

86. *Phyllachora texana* Tharp, Mycologia IX, 1917, p. 118. — Stromatibus magnitudine variabilibus e minute punctiformibus usque 1 mm. diam. et ultra, circularibus, v. confluyendo irregulariter lobatis, utrinque effusis; loculis ascigeris uno v. ultra in quoque perithecio, ostioli unilateralibus v. amphigenis; ascis paraphysatis, clavatis, 50-80 × 10-14; sporidiis typice 8 in quoque asco, monostichis v. distichis, ovoideis utrinque subacutis, hyalinis, unilocularibus, 12-19 × 4-5,5. 5231

Hab. in foliis vivis Acaciae Wrightii, Cotulla, Texas, Amer. bor. (THARP). — A *Ph. Acaciae* P. Henn. distincta.

87. *Phyllachora Afzeliae* Syd., Enum. Philipp. Fungi I, in Philipp. 5232
Journ. of Sci. VIII (1913) p. 277. — Stromatibus epiphyllis, sparsis, leniter prominulis, rotundatis, 0,5-2 mm. latis, nitidulis, atris, intus pluriloculatis, ob loculos prominulos leniter rugulosos; ascis clavatis, 50-60 × 11-14, octosporis; sporidiis fusiformibus, utrinque acutis, continuis, hyalinis, 18-24 × 4,5-5,5; stylosporibus simul praesentibus filiformibus, varie curvis, continuis, hyalinis, tenuissimis, 17-25 × 0,75.

Hab. in foliis vivis Afzeliae (Intsiae) bijugae, (Leguminosae), Mindanao, distr. Cotabato, ins. Philipp.

88. *Phyllachora Apuleiae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5233
Buenos Aires, XXIII (1912) p. 90. — Stromatibus repando-discoideis, 1-3 mm. latis, innatis, atris, levibus, opacis, quandoque simplicibus integris, quandoque compositis, altero centrale fertile majore, caeteris minoribus subcircinantibus, sterilibus cincto, vix prominulis; loculis paucis centralibus, saepe confluentibus, lenticularibus, 120-150 μ diam., astomis; ascis subfusioideis, apice obtuse rotundatis, basi breviter crasseque pedicellatis, 70×18 , pseudoparaphysibus crassis subcoalescentibus obvallatis, octosporis; sporidiis recte distichis vel oblique monostichis, ellipsoideis, utrinque subacutiuscule rotundatis, grosse 1-guttatis, hyalinis, $14 \times 7-8$.

Hab. in foliis vivis Apuleiae praecocis (Leguminosae), in silvis prope Puerto León, Misiones, Argentina

89. *Phyllachora erebia* Syd. in Syd. et Butl., Ann., Mycol. IX, 1911, 5234 p. 396, Theiss. et Syd., Ann. Mycol. 13., 1915, p. 493. — Stromatibus amphigenis, sed plerumque epiphyllis, dense confertis confluentibusque, plus minus late effusis et crustaceis, saepe magnam folii partem occupantibus, aterrimis, loculis minutis omnino immersis; ascis cylindraceutis, $50-70 \times 8-15$, octosporis; sporidiis subglobosis, ovatis v. late ellipsoideis, hyalinis, continuis, $9-12 \times 6-9$.

Hab. in foliis Caraganae sp. (Leguminosae), Harwan, Kashmir, Indiae or. (E. J. BUTLER).

90. *Phyllachora canafistulae* F. L. Stevens et N. Dalby, Bot. Gazette 5235 68., 1919, p. 55, tab. fig. 5-6. — Maculis stromata non excedentibus; stromatibus latis, 2-5 mm., depressis, nigris, utrinque visibilibus, in mesophyllo evolutis, plurilocularibus; clypeo supra marginis prominenti; loculis rotundatis, 155-170 μ diam.; ascis cylindraceutis $72-99 \times 16-20$; sporidiis e ovoideis ellipsoideis, hyalinis, continuis, $13-16 \times 6-8$; paraphysibus filamentosis.

Hab. in foliis Cassiae fistulae (Leguminosae), Mayaguez, Porto Rico. — *A. Phyll. bakeriana* et *Phyll. Cassiae* omnino diversa.

91. *Phyllachora dolichogena* (B. et Br.) Sacc., Syll. II p. 601. — var. 5236
Samoensis Theiss. et Syd., Ann. Mycol. 13., 1915, p. 500. — V. Höhnelt, Fragm. z. Mykol. n. 129. — A typo recedit stromatibus punctiformis et loculis magis confertis; ascis cylindraceuto-clavatis, breviter pedicellatis, $62-80 \times 12-16$, paraphysatis; sporidiis monostichis v. distichis, hyalinis, unilocularibus, ovoideis, $12-13 \times 8-9$.

Hab. in foliis *Dolichos* sp. (Leguminosae), Upolu, Samoa (RECHINGER).

92. *Phyllachora bakeriana* P. Henn., Hedw. vol. 48 (1908) p. 106; Rehm, 5237

Ascomyc. n. 1788; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 494. — Maculis flavo-fusculis, indeterminatis; stromatibus epiphyllis, gregariis, rotundato-pulvinatis, planis, atris, punctoideo-ostiolatis, 0,6-1 mm. diam.; peritheciis immersis, rufo-brunneis, globulosis; ascis subclavatis vel fusoides, vertice applanatis vel obtusis, octosporis, paraphysatis, 60-80 × 8-12; sporidiis subdistichis, oblonge fusoides, utrinque acutis vel rotundatis, subcurvulis, hyalinis, 14-24 × 4-5.

Hab. in foliis *Cassiae Hoffmanseggianae* (Leguminosae), hort. bot. Goeldi, Pará (C. F. BAKER). — A *Ph. Cassiae* P. Henn. omnino distincta.

93. *Phyllachora Cratyliae* Syd., Ann. Mycol. 14., 1916, p. 83. — Stro- 5238

matibus epiphyllis, sine maculis, sparsis, minutis, ca. 1 mm. diam., non confluentibus, plerumque fere orbicularibus, lenissime convexis nitidulis, plurilocularibus, in hypophyllo parum manifestis; clypeo epidermali, epiphyllis ca. 25-30 μ crasso, saepe etiam hypophyllo sed minus evoluto; loculis subglobosis, 150-220 μ diam., in mesophyllo sitis, epidermidem hypophyllam attingentibus v. fere attingentibus, pariete 12-14 μ lato brunneo; ascis cylindraco-clavatis, non vel brevissime stipitatis, 55-70 × 12-14, octosporis, copiosissime paraphysatis; sporidiis oblique monostichis vel distichis, anguste clavatis, superne rotundatis, inferne plerumque attenuatis, continuis, hyalinis 23-26 × 5.

Hab. in foliis *Cratyliae floribundae* (Leguminosae), Seringal Auristella, Rio Acre, Peruvia (E. ULE).

94. *Phyllachora dalbergiicola* P. Henn. — Syll. XVI p. 619. — fm. Legu- 5239

minum Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2219.

Hab. in leguminibus *Dalbergiae ferrugineae* (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

95. *Phyllachora lactea* Theiss. et Syd., Ann. Mycol. 13., 1915 p. 497. — 5240

Ita vocanda *Auerswaldia Dalbergiae* P. Henn.

Hab. in foliis *Dalbergiae lacteae* (Leguminosae), Kilimandscharo, Africae trop.

96. *Phyllachora affinis* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 498. — 5241

Ita vocanda est *Phyll. yapensis* (P. Henn.) Syd. var. *rhytismoides* Rehm, quia jam extat *Phyll. rhytismoides* (Corda) Sacc.

Hab. in foliis *Derridis philippinensis* (Leguminosae),

Los Baños Luzon, Ins. Philippin.

97. *Phyllachora spissa* Syd. et Syd. et Butl., Ann. Mycol. IX, 1911, 5242 p. 397. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 497. — Maculis irregularibus, usque 1 cm. diam., brunneolis; stromatibus amphigenis, innatis, in maculis dense aggregatis, minutissimis, punctiformibus, 140-230 μ diam., atris, 1-ocularibus, rarissime binis confluentibus et tunc 2-ocularibus, convexulis, minute ostiolatis; ascis oblongo-clavatis, copiose paraphysatis, apice obtusis, brevissime stipitatis, 55-62 \times 14-16, octosporis; sporidiis oblique monostichis v. distichis, ellipsoideis usque oblongis, utrinque obtusis, continuis, hyalinis, 12,5-16,5 \times 5,5-6,5.

Hab. in foliis Dalbergiae Sissoo (Leguminosae), Wy-naad, Indiae or. (W. Mc RAE).

98. *Phyllachora yapensis* (P. Henn.) Syd., Enum. Philipp. Fungi I, in 5243 Philipp. Journ. of Sci. VIII (1913) p. 273. — *Dothidella yapensis* P. Henn. — Syll. XVII p. 848. — *Auerswaldia Derridis* P. Henn., Syll. XXII p. 428, *Phyllachora Lagunae* Rehm, Ascom. Philipp. III, in Philipp. Journ. of Sc. VIII, 1913, p. 396. — Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 498; Sydow, Philipp. Journ. of Sc. IX Sect. C., 1914, p. 168. — Teste cl. Sydow, specimina originalia sporidiis continuis nec bilocularibus gaudent; inde species ad gen. *Phyllachoram* adscribenda.

Hab. quoque in foliis *Derridis* spp. (Leguminosae), in Ins. Philipp., *Derridis ellipticae*, Ins. Yap (Carolina), Ins. Java. — Verisim. huc pertinet etiam *Cryptomyces Pongamiae* Racib. nec (B. et Br.) Sacc.

99. *Phyllachora affinis* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 498 5244 nom. nov., *Phyllachora yapensis* (P. Henn.) Syd. — Syll. XVII p. 848. — var. *rhytismoides* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2218. — Stromatibus epiphyllis, irregulariter orbicularibus, 5 mm. usque latis, loculos plurimos includentibus. Ceterum ut in specie.

Hab. in foliis *Derridis philippinensis* (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. RAIMUNDO). — Primo aspectu *Rhytisma* videtur. — Sporidia, sec. Anet., 1-cellularia, guttis 2 magnis replete.

100. *Phyllachora Lathyri* (Lév.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5245 p. 501. — Syn. *Diachora Onobrychidis* (DC.) J. Müll., Syll. XI p. 3.4, *Mazzantia fennica* Lind, Ann. Mycol. 13., 1915, p. 22, fig. 2.
101. *Phyllachora Lonchocarpi* Har. et Pat. in Bull. Mus. Hist. Nat. 5246

Paris 1911, p. 367; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 503. — Epiphylla; stromatibus irregulariter angulosis, 1-3 mm. diam., nitidis, vix ostiolorum ope punctulatis, bullatis; loculis numerosis (10-15); ascis clavatis, paraphysatis, octosporis, 100×20 ; sporidiis irregulariter distichis, hyalinis, ellipsoideis, $14-16 \times 9$.

Hab. in foliis languidis, fere exsiccatis, *Lonchocarp*i (Leguminosae), Ohar: Dar-Rounda, Djalmda, Congo gallico.

102. *Phyllachora Pahudiae* Syd., Enum. Philipp. Fungi I, in Philipp. 5247

Journ. of Sci. VIII (1913) p. 277 — Rehm, Ascomyc. n. 2048; Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 506. — Stromatibus epiphyllis, in hypophyllo plus minusve conspicuis, innatis, lenissime prominulis, in greges circulares 3-10 mm. diam. concentrice dispositis, minutis, rotundatis, $0.25-0.5$ mm. diam., subinde confluentibus et majoribus, atris; ascis... jam resorptis; sporidiis fusiformibus, utrinque attenuatis, continuis, hyalinis, $16-19 \times 3.5-5$.

Hab. in foliis vivis *Pahudiae rhomboideae* (Leguminosae), Cebu, ins. Philipp.

103. *Phyllachora Peltophori* P. et H. Syd., Ann. Mycol. X, 1912, p. 40; 5248

Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 507. — Stromatibus amphigenis, sparsis v. irregulariter aggregatis, perexiguis, $\frac{1}{3}-0.5$ mm. diam., leniter convexis, 1-paucilocularibus, atris; ascis clavatis, $65-80 \times 14-18$, octosporis; sporidiis oblique distichis usque subdistichis, ellipsoideis, $13-17 \times 6-8$, utrinque rotundatis, continuis, hyalinis.

Hab. in foliis *Peltophori africani* (Leguminosae), Led-gee Zoutpansberg, Transvaal (E. M. DODGE).

104. *Phyllachora Phanerae* Racib. in Theiss. et Syd., Ann. Mycol. 13., 5249

1915, p. 490. — Stromatibus epiphyllis, solitariis, rotundatis, carbonaceis, nitidulis usque 0,8 mm. latis in maculis flavescentibus insidentibus; loculis 2-4 in medio stromatum sitis rotundatis v. parum depressis 200μ circ. diam., ostiolo punctiformi et parietibus pallide brunneis tenuioribus praeditis; paraphysibus filiformibus, hyalinis; ascis elongato-cylindraceis, apice rotundatis, medio latioribus utrinque angustatis, $90-110 \times 15-18$, octosporis; sporidiis monostichis, hyalinis, unilocularibus, levibus, $14-16 \times 9$.

Hab. in foliis *Phanerae* sp. (Leguminosae), Tjampea prope Buitenzorg, Java. — Socia *Dothiopsis Phanerae* Rac. cuius status pycnidicus verisimiliter sistit. — Var. *longispora* Theiss. et Syd., l. c. p. 491. — *Phyll. tenuis* v. Höhn. nec B. et C. — A typo recedit sporidiis longioribus, $20-27 \times 5-6.5$. — *Hab.* in foliis *Phanerae*

glaucæ, Buitenzorg, Java.

105. *Phyllachora phaseolina* Syd., Enum. Philipp. Fungi II, in Philipp. 5250 Journ. of Sci. VIII 1913) p. 494; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 507. — Stromatibus epiphyllis, sparsis, leniter convexis, in hypophyllo non vel parum conspicuis, irregularibus, minutis, 0,4-1 mm. diam., atris, opacis, intus paucilocularibus; ascis cylindraceis vel clavatis, 40-50 × 10-14, octosporis; sporidiis subglobosis vel late ellipsoideis, continuis, hyalinis, 8-10 × 5-7.

Hab. in foliis *Phaseoli calcarati* (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER).

106. *Phyllachora* ? *piptadenicola* Speg., Mycet. Argent. VI, Anal. Mus. 5251 Nac. Buenos Aires, XXIII (1912) p. 91. — Maculis nullis vel vix manifestis pallescentibus; stromatibus (peritheciis?) epiphyllis, gregariis vel hinc inde confertis sed non confluentibus, parenchymate innatis, minutis, prominulo convexis, 180-250 µ diam., atris, nitidis, obsolete ostiolatis, unilocularibus, coriaceis, contextu indistincto; ascis subfusoides, breviter cuneato-pedicellatis, 60-70 × 14-15, paraphysibus filiformibus parum longioribus parce obvallatis; sporidiis oblique 2-3-stichis, subellipsoideis, inaequilateris, utrinque subacutiusculis, eguttulatis, hyalinis, 14-16 × 6-7.

Hab. in foliis vivis *Piptadeniae rigidae* (Leguminosae), in silvis prope Puerto León, Misiones, Argentina.

107. *Phyllachora Pusaethae* v. Höhn., Fragm. zur Mykol. 771 in Stzgsb. 5252 Akad. Wiss. Wien CXXI, I, p. 389. — Syn. *Phyll. Entadae* Rac. ined. sec. Theiss. et Syd., Ann. Myc. 13., 1915, p. 508. — Stromatibus sparsis, singulis in maculis luteolis evanescentibus 2-3 mm. latis insidentibus, applanatis, circularibus, carbonaceis, nitidis, utrinque conspicuis, 0,3-1 mm. latis, 1-2-5-locularibus, contextu stromatis opaco, atro; loculis in sectione e rotundato angulatis, 150-300 µ latis, 240 µ altis, ostiolo minuto circulari pertusis; ascis fusoides-clavatis basi in pedicellum 20 × 4 productis, apice conoideo-atenuatis, 50-80 × 10-12, paraphysibus tenuibus curvulis obvallatis; sporidiis oblique distichis, oblongo-ellipsoideis, hyalinis, rectis, utrinque rotundatis, 12-13 × 4-5.

Hab. in foliis vivis *Pusaethae* (*Entadae*) sp. (Leguminosae), in horto botan. Buitenzorg, Java. — Stromata interdum in maculis majoribus non propriis insidentia.

108. *Phyllachora umbilicata* Theiss. et Syd., Ann. Mycol. 13., 1915, 5253 p. 510. — Rehm, Ascom. exs. n. 1565 (sub *Phyll. Trifolii*). — Stromatibus arcte gregariis, confluentibus minutis, prominentibus, um-

bilicatis, folium incrassantibus usque 240-280 μ (folium normale 140-170 μ cr.); loculis plerumque numerosis, globosis v. depresso globosis, 140-165 μ latis, $2\frac{1}{2}$ folii occupantibus nec hypophyllum attingentibus; stratu ascigero typice phyllachoroideo; ascis breviter pedicellatis, 56-65 \times 11-14, modice paraphysatis; sporidiis monostichis, unilocularibus, hyalinis, ellipsoideis, utrinque obtuse rotundatis, 11 \times 5,5-6.

Hab. in foliis *Trifolii Wormskiöldii* (Leguminosae), Montana Point, California (COPELAND).

99. *Phyllachora Smilacis* Gz. Frag. Flor. Microm. Catal. 1917, p. 99, 5254 fig. 17. — Stromatibus irregularibus, 0,5-1 mm. lat., nigris, opacis, loculis paucis applanatis, subastomis; ascis oblongo-clavatis, 48-54 \times 26-30, breviter pedicellatis, apice rotundatis crassiuscule tunicatis; paraphysibus filiformibus, guttulatis, subramosis; sporidiis irregulariter distichis, ovoideo-oblongis uno apice obtusioribus, 15-17 \times 7-9, guttulis minutis et majusculis praeditis, continuis.

Hab. in sarmentis emortuis *Smilacis asperae* (Liliaceae), La Rabasada pr. Barcelona, Hispaniae.

110. *Phyllachora Hugoniae* Theiss et Syd., Ann. Mycol. 13., 1915, p. 5255 512. — Stromatibus arcte gregariis follicolis, utrinque visibilibus, irregulariter rotundatis, 1-2 mm latis, depresso, parum prominentibus, nitide nigris, in hypophyllo parum elevatis, in epiphylllo minute ostiolatis; clypeo amphigeno epidermali 30-36 μ crasso; loculis folium percurrentibus, parum inter se remotis, depresso globosis, 300-400 μ latis 250 μ altis, parietibus tenuioribus (8-10 μ) brunneis praeditis, praecipue ad apicem hyphis stromaticis radiantibus praeditis; ascis cylindraceis, paraphysatis, 60-70 \times 8-10; sporidiis monostichis, hyalinis, unilocularibus, ellipsoideis, rotundatis, 11 \times 5,5.

Hab. in foliis *Hugoniae mystax* (Linaceae), Ceylon, Asia.

111. *Phyllachora Banisteriae* F. L. Stevens et N. Dalby, Bot. Gazette 5256 68., 1919, p. 54, tab. fig. 1-2. — Maculis nullis; stromatibus numerosis, sparsis, 1-2 mm. diam., rotundatis v. saepius elongatis; nigris, utrinque visibilibus, in mesophyllo parce evolutis; clypeo amphigeno, tenui, ab epidermide limitato; loculis paucis, latis, circ. 190 \times 270; ascis octosporis cylindraceis; sporidiis oblongis, hyalinis, continuis, 35 \times 14. — Conidia septorioidea, in pycnidii supra stromata evolutis.

Hab. in foliis *Banisteriae tomentosae* (Malpighiaceae), Vega Baja, Porto Rico. — A *Ph. pestis-nigra* Spg. pluribus

notis diversa.

112. *Phyllachora Melastomacearum* Racib. in Theiss. et Syd., Ann. Myc. 5257
13., 1915, p. 540. — Pseudostromatibus epiphyllis rotundatis v. polygoniis, usque 9 mm. latis, nigris, in maculis pallidis angustis et zonula nigro-violacea latiori limitata insidentibus; loculis 2-5 de-
presse globosis in folio omnino immersis, minute ostiolatis; loculis 100-140 μ altis 130-180 μ latis parietibus brunneis limitatis; ascis copiose paraphysatis, cylindraceutis apice angustatis, obtusis, octosporis, 98-106 \times 12-14; sporidiis unilocularibus, ovoideis, levibus, hyalinis, monostichis, 10-13 \times 6.

Hab. in foliis *Dissochaetae* sp. (Melastomaceae), Tjibodas in Gedeh et in Tankvetan Prave.

113. *Phyllachora Heterotrichi* F. L. Stevens et N. Dalby Bot. Gazette 5278
68., 1919, p. 56 (corr. *heterotrichae*), tab. fig. 9-10. — Maculis parvis 2-4 mm. diam., subcircularibus, pallidis utrinque visibilibus; stromatibus nigris, ambitu irregularibus infra magis prominentibus, 1-2 mm. diam., totam crassitudinem foliorum occupantibus et majorem quam in parte normale foliorum; clypeo epidermico epiphyllis et saepe ultra perithecia effuso, in hypophyllo strictiore; loculis numerosis circ. 110-150 μ diam., parietibus bene evolutis; ascis octosporis; sporidiis 13-14 \times 3,5-4, continuis, hyalinis.

Hab. in foliis *Heterotrichi cymosi* (Melastomataceae), Villa Alba, Porto Rico. — A *Ph. Melastomacearum* Rac. stromatibus a *Ph. aliena* peritheciis distincte minoribus diversa.

114. *Phyllachora aliena* H. et P. Syd., Ann. Mycol. X, 1912, p. 407. — 5259
Stromatibus epiphyllis, sparsis v. aggregatis, saepe annuliformiter dispositis confluentibus et tunc annulatis spatium medium vacuum relinquentibus, 1-2,5 mm. diam., primitus extus dilute brunneis, tandem atris, opacis, levibus, tenuibus, intus albidis; loculis ca. 8-20 in quoque stromate, rotundatis, omnino immersis, 125-150 μ diam.; ascis plerumque cylindraceutis-clavatis, 80-100 \times 9-10, octosporis; sporidiis monostichis, ellipsoideo-oblongis, utrinque rotundatis, continuis, hyalinis, 9-12 \times 4-5.

Hab. in foliis *Mamecyli edulis* (Melastomaceae), Mathuran, Bombay Presid., Indiae or. (S. L. AJREKAR).

115. *Phyllachora neomexicana* Trotter n. nov. — *Phyllachora mexicana* 5260
Sacc., Ann. Mycol. XI, 1913, p. 546, nec Turconi, Syll. XVII p. 832. — Stromatibus hypophyllis, subsuperficialibus, 10-20 hinc inde in soros laxo congregatis, aterrimis, 0,5 mm. diam., loculis globosis nonnihil protuberantibus, 100 μ diam., poro minuto pertusis; ascis

cylindræis, apice rotundatis, crasse brevissimeque pedicellatis, $95-98 \times 11-11,5$, paraphysibus filiformibus copiosis multo superantibus (h. e. $140-160 \times 7-9$) hyalinis obvallatis; sporidiis oblique monostichis ellipsoideis, $12-14 \times 9-11$, dilutissime chlorinis, senio fuscellis, levibus.

Hab. in foliis nondum emortuis *Miconiæ* sp. (Melastomataceæ), Oaxaca (Mexico). — A *Phyll. Miconiæ* P. Henn. (non Duby) ascis cylindricis, a *Physalospora Miconiæ* (Duby) Sacc. stromatibus exclusive hypophyllis, a *Phyll. Sellowii* P. Henn. sporidiis multo crassioribus, stromatibus non sparsis etc. dignoscenda species. Fungus Dubyi videtur affinior et aptius *Phyllachora Miconiæ* (Duby) Sacc., nuncupandus; tunc species homonyma Henningsii, *Phyllachora Henningsiana* Sacc. dicenda est. — *Phyllachora laurina* Oke, teste Theissen et Syd., Ann. Mycol. 13., 1915, p. 568, non differt, sed revera in *Miconia*, non in *Lauro* nascitur.

116. *Phyllachora miconiicola* Spegaz., Fungi Costaric. noun. in Bol. Ac. 5261
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 205. — Epiphylla; maculae orbiculares, 26 mm. diam. centro rufescentes. ambitu late atro-caerulescentes indeterminatae; stromata in parte centrali macularum innato-prominula, parvula, $120-200 \mu$ diam saepius 2-5-gregaria ac confluentia, atra, laevia, opaca, perforato-ostiolata, contextu indistincto; asci cylindræi paraphysati 8 spori, breviter pedicellati $90-100 \times 12$; sporae ellipticae utrinque acutiusculae, non v. grosse 1-guttulatae, laeves, hyalinae, $15 \times 7-8$.

Hab. in foliis vivis *Miconiæ* cujusdam ignotae, in silvis Volcân de Poas, Costarica, America trop.

117. *Phyllachora Mouririae* Syd., Ann. Mycol., 14., 1916, p. 83. — Stro- 5262
matibus utrinque perspicuis, sparsis, rotundatis; $11,5$ mm. diam., atro-nitidis, ob loculos prominulos rugulosos, paucilocularibus, totam folii crassitudinem occupantibus, sine maculis; clypeo in utraque epidermide, $60-80 \mu$ crasso, densissimo, opaco, aterrimo; loculis variabilibus, mox altioribus quam latioribus, mox e contra latioribus quam altioribus usque 350μ ; ascis cylindræis, $80-100 \times 10$, paraphysatis, octosporis; sporidiis plerumque oblique monostichis, fusiformibus, utrinque leniter attenuatis, continuis, hyalinis, $18-22 \times 4$.

Hab. in foliis *Mouririae* *Apirangae* (Melastomataceæ), Seringal Auristella, Peruvia.

118. *Phyllachora Meliae* Pat., Bull. Soc. Mycol. Fr. 29., 1913, p. 226. — 5263
Stromatibus epiphyllis, sparsis, parvis, angulosis, orbicularibus v. elongatis, nitidis, convexis, glabris, 1-5 locularibus, ovoideis, nucleo

mucoso albo praeditis; ascis clavatis, 4,5-7,5 \approx 15-18, octosporis; paraphysibus cylindraceis, hyalinis, mucosis, septatis, 3-4 μ cr.; sporidiis distichis, hyalinis, ovoideis, 10-12 \approx 5-6, contextu primum granuloso dein aequali.

Hab. in foliis *Meliae Azedarach* (Meliaceae), Hanoi Tonkin, Cinae (DUPOET).

119. *Phyllachora Bersamae* Lingelsh., Engler, bot. Jahrb. 39., 1907, 5264

p. 604. — Maculis primo carbonaceo-nigris dein flavido-fuscis; ostioli punctiformibus v. conicis, nigris gregariis; peritheciis immersis, nigris, applanatis, maturis 150-170 μ alt. 450-480 μ latis; ascis octosporis clavatis 60-70 μ long., membrana tenuissima praeditis; sporidiis mono-v. distichis, flavidis, ellipsoideis, 14-16 \approx 9,5-10, biguttulatis oleosis instructis, paraphysibus hyalinis filiformibus.

Hab. in foliis *Bersamae abyssinicae* (Melianthaceae), Deru, prov. Tschertscher, 2300 m. alt., Aethiopia. — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915. p. 565, eadem est ac *Physalospora Bersamae* Syd., Syll. XXII p. 82.

120. *Phyllachora dolichospora* Syd. in Syd. et Butl., Ann. Mycol. IX, 5265

1911, p. 396, Theiss. et Syd., Ann. Mycol. 13., 1915, p. 476. — Stromatibus amphigenis, sparsis, irregularibus, rotundatis v. saepe angulatis, planis vix vel lenissime rugulosis, atris, usque 3 mm. long., loculis numerosis, dense stipatis, globosis, 140-200 μ diam.; ascis cylindraceo-clavatis, rectis vel curvulis, utrinque saepe attenuatis, 70-80 \approx 8-15, octosporis; sporidiis fusiformibus, utrinque attenuatis et plus minus acutis, continuis, hyalinis, in cumulo flavidis, 21-26 \approx 4-6.

Hab. in foliis *Tinosporae cordifoliae* (Menispermaceae), Solebile, Mysore, Indiae or. (E. J. BUTLER).

121. *Phyllachora Cannabidis* P. Henn., Hedw. vol. 48 (1908) p. 8. — 5266

Stromatibus cauliculis dense gregariis, plano-pulvinatis, atro-opacis, angulato-rotundatis; ascis clavatis, apice rotundatis, octosporis, 45-55 \approx 10-12; sporidiis oblique monostichis vel distichis, subfusoides vel ovoideis, hyalinis, continuis, umbilicosis, 12-17 \approx 5-6.

Hab. in caulibus *Cannabidis sativae* (Moraceae), Capital, S. Paulo, Brasilia. — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 565, ad Clypeosphaeriaceas pertinet nec ad Phyllachoraceas.

122. *Phyllachora pseudos* Rehm, Ascomyc. Philipp. III, in Philipp. 5267

Journ. of Sci. VIII (1913) p. 396. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 470. — Stromatibus gregariis, folio plane innatis, utrinque dilute flavidule tectis, paginam superiorem folii protuberanti-

bus ibique papillis conoideis nigrescentibus prominentibus conspicuis, atris, subglobosis, 1 mm. circiter diam., loculos 3-5 includentibus, demum elapsis lacunulam in folii parenchymate relinquentibus; ascis clavatis, octosporis, aparaphysatis, 60×15 ; sporidiis distichis, oblongis, utrinque rotundatis, continuis, haud guttatis, hyalinis, $10-12 \times 6-9$.

Hab. in foliis *Fici notae*, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — Ob stroma in parenchymate omnino evolutum ut typus novi generis *Endophyllachora* Rehm habenda. — Affinis videtur *Phomatospora elastica* Zimm. sed ascis sporidiisque diversis.

123. *Phyllachora Dawei* Masee, Bull. Bot. Garden Kew 1908, p. 218. — 5268

Stromatibus epiphyllis, superficialibus, effuso-crustaceis, bullatis, atris, rugulosis, 4-7 mm. diam., subglobosis, laxe aggregatis vel confluentibus, dense loculiferis, contextu indistincto; loculis saepe confluentibus, difformibus; ascis cylindraceis, apice rotundatis, deorsum attenuato-pedicellatis, $80-100 \times 11-12$, octosporis, dense paraphysatis; sporidiis oblique monostichis, hyalinis, ellipsoideis, utrinque rotundatis, continuis, $21-23 \times 9-10$.

Hab. in foliis vivis *Ficus* sp., vulgo «Kokamve» dicta, Buddu, Uganda, Afr. trop. (DAWE). — *Ph. repenti* Sacc. cognata; differt stromatibus latoribus non seriatis, sporidiisque crassioribus.

- 124 *Phyllachora Pittieri* Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 5269

544. — Ita vocanda est *Phyll. Tonduzii* P. Henn. nec Bomm. et Rouss. — Syll. XVII p. 835. — In Myrsinaceis.

125. *Phyllachora gentilis* Speg. — Syll. XI p. 369. — Var. *Calyptranthis* 5270

Pateuill., Bull. Soc. Mycol. 1912, p. 141. — Stromatibus sparsis, 1-3 mm. diam., orbicularibus v. confluenso angulosis, convexis, nigris lucidis, levibus v. ostioliis tantum punctulatis; maculis in foliis nullis in fructibus ex aureola rubrida constitutis; loculis paucis; ascis clavatis, apice rotundatis basi stipitato-attenuatis, $75-85 \times 20$, paraphysibus linearibus 2-3 μ cr., contentu granuloso subgelatinoso; sporidiis distichis, hyalinis, ellipsoideo-obtusis, $18-20 \times 7$, centro grosse uniguttulatis, tunica crassa praeditis; spermogoniis immixtis, sporulis filiformibus, hyalinis $15-18 \times 1-1.5$, copiosis.

Hab. in foliis fructibusque *Calyptranthis Tonduzii* (Myrtaceae), San José Costa Rica, America Centr.

126. *Phyllachora Ricklana* Theissen, Ann. Mycol. 16., 1918, p. 185, 5271

Dothidella? *placentiformis* Rehm, Ascom. 1790, Theissen Dec. fung. brasil. 40-41. — Olypeo epidermali amphigeno 2-3 mm. lato, extus

nitide nigro, inflato, folium usque 500 μ cr. (nec 279 μ ut in folio normale), 40-50 μ cr.; peritheciis globosis collo terminatis, circ. 400-430 μ altis et latis, distinctis, in epiphyllis aperientibus, membrana brunnea distincta crassitudine variabili praeditis; ascis lateraliter radiantibus, paraphysatis, 68-78 \times 14-15; sporidiis distichis ellipsoideis, 10-13 \times 6, hyalinis, unilocularibus.

Hab. in foliis *Ocampomanesia* sp. (Myrtaceae), Rio Grande do Sul, Brasilia (THEISSEN).

127. *Phyllachora ambigua* (Syd.) Syd., Ann. Mycol. 13., 1915, p. 537, 5272

Trabutia ambigua Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 411; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 537. — Stromatibus epiphyllis, sparsis, planis, rotundatis v. irregularibus, 1,5-4 mm. long., atris, opacis, haud typice evolutis, perithecia crusta atra stromatica obtegentibus; peritheciis numerosis in quoque stromate, contextu foliorum omnino immersis, in hypophyllo etiam sed paullo manifestis, irregulariter distributis v. dense aggregatis, globosis, 150-200 μ diam., pariete proprio praeditis; ascis cylindraceutis v. cylindraceuto-clavatis, 48-60 \times 8-12, octosporis; sporidiis plus minus irregulariter monostichis usque subdistichis, subglobosis v. late ellipsoideis, continuis, hyalinis, 9-11 \times 6-8.

Hab. in foliis *Eugeniae Jambolanae* (Myrtaceae), Koppa Mysore, Indiae or. (E. J. BUTLER).

128. *Phyllachora rimulosa* Spegaz., Fungi Costaric. nonn., in Bot. Ac. 5273

Nac. Cienc. Cordoba, t. 23, 1919, Extr. p. 206. — Stromata epiphylla, irregulariter repando-elliptica, definita, tenuia, planiuscula, foveolis nonnullis pusillis rotundis impressis centro minute papillato-umbilicatis notata, primo laevia non v. vix subnitidula, serius opaca dense reticulato-rimulosa atque cortice crustoso frustulatim deciduo vestita; loculi parum numerosi, sub foveolis tantum siti, applanato-lenticulares minuti, 150-180 μ diam., eximie minuteque papillato-ostiolati; asci cylindraceuti, antice rotundati, postice breviter cuneato-pedicellati, 8-sporei, paraphysati, 85-100 \times 10; sporeae oblique monostichae, ellipticae, utrinque rotundatae, saepius grosse trigut-
tulae, hyalinae, 14 \times 8.

Hab. in foliis vivis *Eugeniae* (? *costaricensis*), (Myrtaceae), prope S. José Costarica, America trop.

129. *Phyllachora angustispora* Spegaz., Rel. Mycol. trop. etc. in Bol. 5274

Ac. Nac. Cienc. Cordoba, t. 23., 1919, p. 127. — Stromata saepius hypophylla repando-orbicularia, 0,5-2 mm. diam. innato-superficialia convexula leniter calliculosa, atra opaca v. vix nitidula; loculi sae-

pius pauci subglobosi, $120 \times 150 \mu$ diam. albo-farcti; asci subclavulati, apice subtruncati, deorsum sensim modiceque attenuato-pedicellati, octospori, paraphysati $80-90 \times 12-14$; sporae recte distichae angustae utrinque attenuatae subacutiusculae, non v. vix inaequilaterales, hyalinae, $30 \times 8-9$.

Hab. ad folia viva *Eugeniae* sp. (Myrtaceae), prope Recoleta, Asunción, Paraguay, America austr. trop. (J. D. ANISITZ). — Proxima *Phyll. tropicali* Speg.

130. *Phyllachora curvulispora* P. Henn., Hedw. vol. 48 (1908) p. 7. — 5275

Stromatibus epiphyllis, sparsis vel aggregatis, rotundato-pulvinatis, 3-5 mm. diam., atro-nitentibus, loculis subglobosis, ostiolis vix prominulis; ascis clavatis, obtusis, octosporis, $60-80 \times 10-20$; sporidiis subdistichis, fusoides, curvulis, hyalinis, intus granulosis, continuis, $17-20 \times 5-7$.

Hab. in foliis *Myrtaceae*, Morro Pellado, S. Paulo, Brasilia.

131. *Phyllachora Nepenthidis* Rac. in Theiss. et Syd., Ann. Mycol., 13., 5276

1915, p. 484. — Stromatibus irregulariter sparsis, nigris, intus subcarbonaceis, rotundatis v. breviter ellipsoideis prominentibus, 2-3 mm. latis, parum nitidis, zona angusta flavidula circumdati; loculis 2-3, v. usque 10 et tunc anulatum dispositis, in hypophyllo minute ostiolatis, depresso ellipsoideis $150-180 \mu$ altis $200-300 \mu$ latis; paraphysibus filiformibus; ascis cylindraceis, tenuiter tunicatis, apice rotundatis, $130-140 \times 8-11$, octosporis; sporidiis monostichis, ovato-globosis, levibus, hyalinis, $8-10 \times 6-7$, utrinque late rotundatis.

Hab. in foliis *Nepenthis melamphorae* (Nepenthaceae), Gunung Gagak prope Salak, Java (RACIBORSKI).

132. *Phyllachora Mayepeae* F. L. Stevens et N. Dalby, Bot. Gazette, 5277

68., 1919, p. 56, tab. fig. 14. — Maculis irregulariter circularibus indefinitis folium pallidiorem reddentibus, 3-15 mm. diam.; stromatibus numerosis (5-50) nigris punctiformibus, utrinque aequaliter visibilibus, $200-1000 \mu$ diam., mesophyllum occupantibus; clypeis amphigenis sed stromata vix leniter excedentibus; stromatibus uniocularibus; loculis latis, globosis, ascis numerosis, $58-85 \times 18-27$; paraphysibus filiformibus; sporidiis $9-19 \times 7-12$, hyalinis continuis,

Hab. in foliis *Mayepeae dominicensis* (Oleaceae), Moricao, Mayaguez Mesa, Coamo, Porto Rico.

133. *Phyllachora Roystoneae* J. R. Johnston et St. C. Bruner, Myco- 5278

logia 10., 1918, p. 43, tab. 2. — Stromatibus subcutaneis epidermide et mesophyllo innatis, nigris carbonaceis, gregariis, in greges elongatos (2-5 cm. \times 1-6 mm.) congestis; stromatibus singulis e

subrotundatis subellipticis e convexis conico-convexis plerumque 0,3-1 mm. diam.; loculis subrotundatis in stratum confertis 260-430 μ diam., ostiolo erumpenti praeditis indistincto v. leniter papilliformi; ascis clavatis apice rotundatis v. subapplanatis stipitatis, 116-186 \times 12-20, octosporis; paraphysibus nullis v. mox evanidis; sporidiis irregulariter e monostichis subdistichis, fusoides, utrinque subacutis, hyalinis, tenuiter tunicatis; granuloso-farctis, plerumque multiguttulatis, 22-28,4 \times 8-10.

Hab. in foliis vivis *Roystoneae regiae* (Palmae), Rincon Havana, Cuba.

134. *Phyllachora aequatoriensis* Theiss. et Sydow, Ann. Mycol. 13., 5279 1915, p. 521. — Ita vocanda *Phyll. dendritica* Rehm (Syll. XI p. 371) nec *dendritica* Cke quae anterior. — In Polygalaceae.

135. *Phyllachora Rhopalae* P. Henn., Hedw. vol. 48 (1908) p. 7. — Stro- 5280 matibus epiphyllis, gregariis, angulato-pulvinatis, atro-nitentibus, 3-4 mm. diam., loculis subglobosis, immersis, fuscis; ascis clavatis, vertice obtuse rotundatis, octosporis, paraphysatis, 100-110 μ longis, p. sp. 80-90 \times 9-11; sporidiis oblique monostichis, ellipsoideis, continuis, hyalinis, 12-18 \times 6-7.

Hab. in foliis *Rhopalae brasiliensis* (Proteaceae), Morro Pellado, S. Paulo, Brasilia. — A *Ph. rhopalina* (Mont.) Sacc. distincta.

136. *Phyllachora vesicata* Cooke, Grev. XIII p. 63; Theiss. et Syd., 5281 Ann. Mycol. 13., 1915, p. 485. — Hypophylla; maculis fuscis, irregularibus, confluentibus, stromatibus gregariis, atris, oblongo-angulatis, convexis, minutis; loculis immersis, albis; ascis clavatis; sporidiis ellipticis, continuis, hyalinis, 10 \times 4.

Hab. in foliis *Hirtellae vesicatae* (Rosaceae), Amazonas (SPRUCE).

137. *Phyllachora Physocarp* Jacz., Fungi Ross. exs. n. 290; Theiss. et 5282 Syd., Ann. Mycol. 13., 1915, p. 486. — Stromatibus gregariis, prominentibus, maculis rubridis limitatis, minutis, 0,25-0,4 mm. latis, 13 locularibus; clypeo epidermoidali, epaco; loculis globosis 120-140 μ v. depressis et usque 200 μ latis, 130-160 μ altis; ascis clavatis, pedicellatis, paraphysatis, 60-70 \times 16-20; sporidiis polystichis, hyalinis, unilocularibus, elongatis, 16-18 \times 6-7.

Hab. in foliis *Physocarp* (*Spiraeae*) *amurensis* (Rosaceae), Amur, Asiae.

138. *Phyllachora Ixorae* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 553. — 5283 Stromatibus epiphyllis, sparsis, 1-2 mm. circ. latis, nitide nigris,

rotundato-prominulis, zonula angusta limitatis, in hypophyllo non conspicuis, plurilocularibus; loculis in clypeo nigro epidermoidali 40-50 μ cr. immersis mesophyllum incrassantibus, 300-380 μ latis, 240-280 μ altis, arcte confertis, parietibus stromaticis tenuibus mollibus, brunneis praeditis; stromate hyphali inter loculos sito hinc inde incrassato; ascis cylindraceis, paraphysatis, breviter pedicellatis, octosporis, 65-80 \times 8-10; sporidiis monostichis, elongato-ellipsoideis, utrinque rotundatis, rectis, hyalinis, unilocularibus, 9-11 \times 4-5.

Hab. in foliis *Ixorae parvifoliae* (Rubiaceae), Indiae or. (HOBSON).

139. *Phyllachora Glycosmidis* Petch, Ann. R. Bot. Gard. Peradeniya, 5284 v. VI, P. III, 1917, p. 227. — Stromatibus rotundatis, ad 2 mm. diam., multilocularibus, loculis ad 0,3 mm. diam., ostiolis non prominentibus; ascis cylindraceis, circa 100 \times 6, longe pedicellatis, sporis oblique uniseriatis; sporis oblonge ovoideis, obtusis, hyalinis continuis, 8 12 \times 4-5.

Hab. in foliis *Glycosmis pentaphyllae* (Rutaceae), Nalanda, Ceylon.

140. *Phyllachora Meliosmae* Racib. in Theiss et Syd., Ann. Mycol. 13., 5285 1915, p. 527. — Stromatibus rotundatis, nigris, 2-3 mm. latis, irregulariter sparsis in macula pallide flava insidentibus; loculis usque 15, parum distinctis ostiolo vix prominenti praeditis, usque 300 μ latis usque 250 μ altis; paraphysibus filiformibus; ascis cylindraceo-fusoideis, medio latioribus apice obtusis, 80 \times 8, octosporis; sporidiis hyalinis, monostichis medio quandoque distichis, ovoideis, utrinque acutatis, 13 \times 5 6.

Hab. in foliis *Meliosmae* sp. (Sabiaceae), Depok prope Buitenzorg, Java.

141. *Phyllachora Serjaniae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 92. — Maculis amphigenis circularibus, 5-15 mm. diam., indeterminatis, parum manifestis, pallescens; stromatibus epiphyllis, medioeribus circinantibus, repandulo-suborbicularibus, 1-3 mm. diam. vix convexulis, nigris, glabris, nitidulis; loculis pluribus, lenticularibus, 180-220 μ diam., obsolete ostiolatis, albo-farctis; ascis cylindraceis longiuscule pedicellatis, p. sp. 80-100 \times 15-20, pedicello 20-30 \times 5-10, parce paraphysatis vel etiam paraphysibus carentibus; sporidiis e cylindraceo-ellipsoideis, utrinque obtusissimis, saepius grosse 1-2-guttulatis, hyalinis, 15-20 \times 10-12. Jodi ope nulla.

Hab. in foliis vivis *Serjaniae caracasanae* (Sapin-

daceae), in silvis prope Calilegua, Salta, Argentina. — A *Ph. repente* (Oda.) Sacc. stromatibus majoribus, ascis longius pedicellatis sporidiisque crassioribus et magis obtusis recedere et distincta videtur.

142. *Phyllachora fluminensis* Theiss. et Syd., Ann. Mycol. 13., 1915, 5287 p. 551, *Physalospora fluminensis* Theiss., Broteria 1914, XII, p. 27, fig. 6 b. — Epiphylla, at totam folii laminam pervadens, utrinque prominula, lenticulariter orbicularis v. ellipsoidea, 250-340 μ alta, usque 450 μ lata, macula brunnescente cineta, ostiolo centrali non papillato minuto, atro-nitens, sparsa; asci cylindricei, octospori, paraphysibus numerosis; sporidiis ovato-ellipsoideis, rotundatis, hyalinis, oblique monostichis, 12-14 \times 8.

Hab. in foliis *Solani* sp. (Solanaceae), Rio de Janeiro, Brasiliae (THEISSEN).

143. *Phyllachora Dombeyae* (Syd.) Syd., Ann. Mycol. 13., 1915, p. 532, 5288 *Physalospora Dombeyae* H. et P. Syd., l. c. 10., 1912, p. 441. — Peritheciis epiphyllis maculis flavidis indeterminatis insidentibus, irregulariter aggregatis, immersis, parte superiore prominulis, depresso-globulosis, atris subopacis, phyllachoroideis, 100-130 μ diam., minute papillatis; ascis clavatis, apice plerumque rotundatis, 50-75 \times 15-20, octosporis, indistincte paraphysatis; sporidiis di-tristichis inaequilateris v. lenissime falcatulo-curvatis, continuis, sed plasmate distincte bipartito, utrinque leniter attenuatis, sed apicibus obtusulis, hyalinis, 25-35 \times 3-4,5; pyrenidiosporis simul praesentibus filiformibus, varie curvatis, saepe uncinatis, continuis, hyalinis, 18-26 \times 1-1,5.

Hab. in foliis vivis *Dombeyae rotundifoliae* (Sterculiaceae), Equinefa, Natal, Africa austr. (U. FULLER).

144. *Phyllachora* ? *Guazumae* P. Henn., Hedw. vol. 43 (1908) p. 7; Theiss. 5289 et Syd., Ann. Mycol. 13., 1915, p. 532. — Maculis rufo-fusculis, rotundatis vel effusis; stromatibus epiphyllis, sparsis, rotundato-pulvinatis, atris, plurilocularibus ostiolatis; ascis clavatis, obtusis, octosporis, paraphysatis, 70-75 \times 7-8; sporidiis oblique monostichis, ellipsoideis, ? hyalinis, immaturis.

Hab. in foliis *Guazumae ulmifoliae* (Sterculiaceae), Ipomena, Pedro Santa, S. Paulo, Brasiliae.

145. *Phyllachora Pterospermi* Syd., Ann. Mycol. 15., 1917, p. 226. — Stro- 5290 mata epiphylla, maculis orbicularibus $\frac{1}{2}$ -1 cm. diam. flavidulis immarginatis plerumque circulariter insidentia $\frac{3}{4}$ -1 mm. diam., atro-nitentia, plerumque unilocularia, rarius paucilocularia convexa, cly-

peo crasso aterrimo; asci ovales vel oblongi, paraphysati, 50-65 \times 18-25, octospori; sporae ovato-ellipsoideae, continuæ, late rotundatae, hyalinae, 15-20 \times 9-11.

Hab. in foliis *Pterospermi diversifolii* (Sterculiaceae), Los Baños, Laguna, ins. Philipp. (C. F. BAKER).

146. *Phyllachora transiens* Syd. et Butl., Ann. Mycol. IX, 1911, p. 397. — 5291

Stromatibus hypophyllis, maculis flavidis orbicularibus vix limitatis insidentibus, minutis, 0,5-1 mm. diam., in greges rotundatos 3-5 mm. latos plerumque dispositis, 1-vel confluyendo paucilocularibus, atris, leniter prominulis, opacis; ascis cylindraceo-clavatis v. fusoides, octosporis, breviter stipitatis, 50-70 \times 10-11; sporidiis distichis, oblongis, hyalinis, continuis, 20-22 \times 5-7.

Hab. in foliis *Euryae acuminatae* (Theaceae), Kumaon, Himalaya, Indiae or. (INAYAT).

147. *Phyllachora permixta* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 397. — 5292

Stromatibus innatis, amphigenis, maculis decoloratis indeterminatis plerumque insidentibus, in greges orbiculares v. irregulares 2-10 mm. latos plus minusve dense confertis, minutissimis, punctiformibus, plerumque 1-locularibus, majoribus subinde paucilocularibus, atris; ascis clavato-cylindraceis, 60-80 \times 14-17, octosporis; sporidiis late ellipsoideis, utrinque rotundatis, continuis, hyalinis, monostichis, 12-16 \times 6-8.

Hab. in foliis *Schima Wallichii* (Theaceae), Maymyo, Burma, Indiae or. (E. J. BUTLER).

148. *Phyllachora clypeata* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 5293

529, *Physalospora clypeata* Theiss. Broteria, XII (1914) p. 27. — *Stromatibus* epiphyllis, amphigenis, irregulariter sparsis v. compluribus in maculis rotundatis approximatis, in epiphylllo 0,5-0,8 mm. latis prominentibus, nitide nigris, in hypophyllo minoribus 0,3-0,4 mm., opacis, unilocularibus; localis folium pereurrentibus, depresso ellipsoideis, 340-420 μ latis 200-270 μ altis, supra et infra clypeo epidermoidali limitatis; parietibus lateralibus brunneis distinctis sed tenuioribus mollioribusque quam stromate clypeali; ascis e cylindraceo-clavatis usque ventricosis, copiose paraphysatis, 75-90 \times 18-20; sporidiis monostichis v. distichis, ellipsoideo-elongatis, hyalinis, unilocularibus, utrinque rotundatis, 16-20 \times 8.

Hab. in foliis *Tiliaceae* ejusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia.

149. *Phyllachora Premnae* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 5294

564. — *Stromatibus* epiphyllis, innatis, sed in hypophyllo non vi-

sibilibus, sparsis vel compluribus irregulariter aggregatis, quoad formam et magnitudinem valde variabilibus, 1-4 mm. diam., saepe confluentibus, leniter convexulis, superficie ob ostiola leniter prominentia nitidula rugulosis, intus multilocularibus; stylosporibus filiformibus, varie curvatis, saepe falcatis, continuis, hyalinis, 17-24 \times 1; ascis immaturis tantum visis.

Hab. in foliis *Premnae Cumingianae* (Verbenaceae), San Antonio prov. Laguna, Luzon, Ins. Philippin. (M. RAMOS). — Status conidicus tantum descriptum et tunc aegre ad *Phyllachoram* pertinens. Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 575.

150. *Phyllachora Ochnae* Pat. et Har., Bull. Soc. Mycol. Fr. 28., 1912, 5295 p. 283. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 532. — Maculis amphigenis exaridis, orbicularibus, 6-8 mm. diam., fusciscentibus; stromatibus amphigenis minutis, $\frac{1}{3}$ -0,5 mm. diam., circulatim fere regulariter dispositis, atris, nitentibus, convexis, loculis paucis (1-2); ascis clavatis, 60 \times 12, octosporis; sporidiis pluriseriatis, hyalinis, elongatis, rectis, utrinque subattenuatis, intus pluriguttulatis, 24 \times 5.

Hab. in foliis *Ochnae* sp. (Vitaceae), Ste-Marie-de Madagascar (BOIVIN), Palawan, Ins. Philipp.

151. *Phyllachora congregata* Theiss. et Syd., Ann. Mycol. 13., 1915 5296 p. 520. — Stromatibus hypophyllis, maculis nullis, minutis, punctiformibus, hinc inde gregariis dein confluentibusque, opace nigris, plerumque unilocularibus; clypeo epidermoidali 25-30 μ cr.; loculo late piriformi dimidium crassitudinis foliorum attingenti, 200-280 μ diam.; ascis cylindraco-clavatis, paraphysatis, 70-90 \times 12-15, octosporis; sporidiis monostichis v. distichis, oblongis, utrinque parum angustatis apice rotundatis, unilocularibus, hyalinis, 15-18 \times 5-6; loculis conidialibus parvis globosis 100-120 μ diam.; conidiis filiformibus, curvatis, unilocularibus, hyalinis, 12-14 \times 0,75.

Hab. in foliis *Vochysiae ellipticae* (Vochysiaceae), Brasilia (SELLO).

152. *Phyllachora Gnipae* F. L. Stevens et N. Dalby, Bot. Gazette 68., 5297 1919, p. 56, tab. fig. 27, 28 — Maculis numerosis 0,5-1,5 cm. diam., stromata irregulariter circumdantibus, utrinque brunneis vetustate albicantibus; stromatibus irregulariter rotundatis v. angulosis, 2-5 mm. diam., supra nitide nigris infra pallidioribus, ob perithecia rugulosis; clypeo utrinque 30 μ circ. cr., loculis latiore; loculis numerosis magnitudine variabilibus e 190 \times 95 usque ad 380 \times 190, in mesophyllo innatis; stromatibus loculos parum evolutos circumdantibus; ascis cylindracois octosporis; sporidiis oblongis, hyalinis,

continuis, guttulatis et granulosis, obtusis, 18-20 \approx 6-7.

Hab. in foliis *Gnippae americanae* (?), El Gigante, Porto Rico.

153. **Phyllachora infesta** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 562. — 529

Stromatibus arete confertis 400-500 μ latis in maculis 2-3 mm. latis irregulariter rotundatis; stromatibus in utraque pagina conspicientibus, medio conoideo-elevatis, nitidis, margine depressis, opacis, subconfluentibus; loculis singulis folium percurrentibus, depresso globosis 270-330 μ latis 200-220 μ altis, supra et infra clypeo epidermoidali nigro 17-20 μ cr. tectis; loculis parietibus stromaticis propriis destitutis et in mesophyllo immersis; ascis paraphysatis, cylindraceis, octosporis, 65-80 \approx 10-14; sporidiis monostichis, v. distichis, elongatis, hyalinis, unilocularibus, utrinque rotundatis, rectis, 12-13 \approx 5-5,5.

Hab. in foliis ignotis, Congo, Africa (VANDERYST).

PHYLLACHORELLA Syd., Ann. Mycol. 12., 1914, p. 489. — Stroma

Phyllachorae. Asci aparaphysati. Sporidia continua, hyalina.

1. **Phyllachorella Micheliae** Syd., l. c. — Stromatibus hypophyllis, in 5299

epiphyllis maculas leniter depressas efficientibus, sparsis, rotundatis, 1-4 mm. diam., ca. 200 μ altis, pro ratione parum immersis, matricem elevantibus, atris; loculis dense stipatis, globosis, 140-170 μ diam.; ascis clavatis, apice rotundatis, breviter stipitatis, 55-75 \approx 18-22, octosporis, aparaphysatis; sporidiis distichis, ovato-oblongis, medio saepe contractis, continuis, hyalinis, 16-18 \approx 8-9.

Hab. in foliis *Micheliae niligiricae* (? Magnoliaceae), Ootacamud, Niligiris Madras Pres., Indiae or. (W. MAC RAE).

2. **Phyllachorella oceanica** Ferdinandsen et Winge, Mycologia 12., 1920, 5300

p. 103, cum icon. — Stromatibus matrici tumefactae insidentibus, strato corticali innatis, nunc unilocularibus punctiformibus, nunc crustas moriformi-tuberculatas, usque ad 1 cm. latas formantibus, atris; loculis in tuberculo singulo stromatis pluribus immersis, fere globosis, 500-800 μ diam., supreme strato nigrefacto crasso, quod saepius inter loculos plus minusve prorepat eosque interdum cingit, tectis; stratis subjacentibus matricis hyphis fungi intertextis. Ascis late ellipsoideis, plerumque 55-77 \approx 24-32, sessilibus; paraphysibus nullis; sporidiis octonis, distichis, continuis, hyalinis, multiguttulatis, plurimis, 20-30 \approx 10-13, forma (? secundum aetatem) valde varia; saepius ellipsoideis utrinque late rotundatis vel truncatis, rarius fusiformibus, apicula recta v. subcurvata praeditis.

Hab. in thallo duabus specierum *Sargassi* (Algae) (a O Winge descriptae), Lat. 32°.21' N, long. 45°.20' W (C. H. OSTENFELD).

PUIGGARINA Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 123 (Etyim. a Cl. J. PUIGGARÍ). — Stromata biophila phyllogena innata unilocularia astoma v. obsolete ostiolata atra coriacea; asci octospori; sporae unicellulares hyalinae. — Est *Phyllachora* stromatibus unilocularibus praedita multae species ad gen. *Phyllachoram* v. etiam *Physalosporam*, et *Trabutiam* huc pertinent.

1. **Puiggarina microtheles** Spegaz., l. c., Extr. p. 125 cum icon. — Maculae nullae v. parvae indeterminatae amphigenae 1-3 mm. diam.; stromata epiphylla sparsa v. 2-3 laxe gregaria minuta innata sublenticularia 120-200 mm. diam. nigra nitentiuscula, minute ostiolata; asci cylindranei breviter crasseque pedicellati parce paraphysati 60 × 8-10; sporae elliptico-subfusoidae utrinque acutiusculae, hyalinae, continuae, 12-14 × 5-6. 5301

Hab. ad folia *Trichoclines nutantis* (Compositae), prope Apiaby Brasilia (J. PUIGGARÍ).

2. **Puiggarina myiocoproides** Spegaz., l. c., Extr. p. 126. — Hypophylla, gregaria, maculis destituta, innato-superficialia pusilla nigra subnitidula, semper 1-locularia 150-200 μ diam., obsolete ostiolata, coriaceo-subcarbonacea, contextu atro indistincto; asci subcylindranei, superne rotundati deorsum breviter cuneato-attenuati, paraphysati octospori, 60-70 × 6-7; sporae oblique monostichae, e cylindraneo subellipticae saepius leniter naviculares, utrinque obtusae, grosse 2-guttulatae, laeves, hyalinae, 8-10 × 4. 5302

Hab. ad folia viva?, *Dalbergiae?* (Leguminosae), prope Villarica, America austr. trop. (B. BALANSA).

3. **Puiggarina costaricensis** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 204 cum icon. — Stromata saepius hypophylla, solitaria v. laxe 2-3-gregaria, non maculifera, innato-prominula convexulo-lenticularia, 200-250 μ diam., ostiolata, atra carbonacea laevia non v. vix nitidula; loculi solitarii, nucleo albido faret; asci quandoque clavati, 90-100 × 10-20, sporis eorum dimidio supero conglobatis, dimidio infero longe attenuato-pedicelliformi, quandoque cylindranei, sporis per tota longitudine oblique monostichis, apice obtusissime rotundati; sporae ex elliptico subglobosae, laeves, nubilosae, hyalinae, 14 × 10-11. 5303

Hab. in foliis vivis *Buettneriae carthagenensis*

(Sterculiaceæ), ad rivum Maria Aguilar et circa San José, Costa-rica, America trop.

Sect. 2. Phaeosporae

PHAEOCHORA v Höhn., Fragin. z. Mykol. IX, 1909, p. 444. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 401. — Est *Catacauma* paraphysata, sporidiis brunneis continuis donata. — Typ. gen.:

1. *Phaeochora Chamaeropsis* (Cooke) v. Höhn., l. c., *Auerswaldia Chamaeropsis* (Cooke) Sacc., Syll. II, p. 626. — Etc. 5304

PHAECHORELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 405. — Est *Catacauma* paraphysata, sporidiis brunneis unilocularibus donata. — Typ. gen.:

1. *Phaeochorella Parinarii* (P. Henn.) Th. et Syd., l. c., *Cocconia Parinarii* P. Henn., Syll. XVIII p. 159. 5305
2. *Phaeochorella clypeata* (Wint.) Th. et Syd., l. c., *Auerswaldia clypeata* Wint., Syll. IX p. 1032. 5306

PHAEOTRABUTIELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 360. — Est *Trabutiella* phaeospora et paraphysibus destituta. — Typ. gen.:

1. *Phaeotrabutiella perisporioides* (Sacc.) Theiss. et Syd., l. c., *Phyllachora perisporioides* Sacc., Syll. XI p. 373. 5307

Sect. 3. Hyalodidymae

MUNKIODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 360. — Est *Trabutiella* sporidiis hyalinis inaequaliter septatis donata, paraphysibus praesentibus. — Typ. gen.:

1. *Munkiodothis melastomata* (v. Höhn.) Theiss. et Syd., *Munkiella melastomata* v. Höhn., Syll. XXII p. 434. 5308

OMPHALOSPORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 361. — Stromata subcuticularia, loculi prominentes. Paraphyses praesentes. Sporidia inaequaliter bilocularia, hyalina. — Typ. generis:

1. *Omphalospora Stellariae* (Lib.) Th. et Syd., l. c., *Dothidella Stellariae* (Lib.) Lind., Syll. XXII p. 432. 5309
2. *Omphalospora ambiens* (Lib.) Th. et Syd., l. c., cum icon, *Euryachora ambiens* (Lib.) Fuck., Syll. I p. 660 (descriptio nulla). — Stromatibus ut in *Omph. Stellariae*; hyphis subepidermicis reticulatim di-

spositis; loculis 50-55 μ cr. epidermidem elevatam reddentibus; ascis caespitosis, basilaribus, aparaphysatis, irregulariter clavatis, 26-32 \times 10-14, octosporis; sporidiis 2-3-seriatis, elongatis, leniter clavatis, hyalinis, utrinque rotundatis, 7-10 \times 2,5-3, loco inferiori 2-3 μ .

Hab. in caulibus vetustis *Stellariae nemorum* (Cariophyllaceae), Germania.

REHMIODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 192; 13., 1915, p. 363. — Est *Trabutia* sporidiis hyalinis aequalibus donata; paraphyses praesentes. — Typ. gen.:

1. *Rehmiodothis Osbeckiae* (B. et Br.) Th. et Syd., l. c., *Dothidella Osbeckiae* (B. et Br.) Sacc., Syll. II p. 633. 5311
2. *Rehmiodothis dothideoides* (Speg.) Th. et Syd., l. c., *Clypeolum dothideoides* Speg., Syll. IX p. 1061. 5312
3. *Rehmiodothis myrtincola* (Rehm.) Th. et Syd., l. c., *Dothidella myrtincola* Rehm, Syll. XI p. 375. 5313

ANISOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 406. — Est *Catacauma*, paraphysata, sporidiis hyalodidymis loculis inaequalibus donata. — Typ. gen.:

1. *Anisochora topographica* (Speg.) Theiss. et Syd., l. c., *Munkiella topographica* Speg., Syll. IX p. 1035. 5314

PLACOSTROMA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 269; 13., 1915, p. 407. — Est *Catacauma* paraphysata, sporidiis hyalodidymis, loculis aequalibus donata.

1. *Placostroma Pterocarpi* (Mass.) Th. et Syd., l. c. *Dothidella Pterocarpi* Masee, Bull. Bot. Garden Kew, 1912, p. 357, fig. 5, 6, 9, 10 — Syn. *Phyllachora Pterocarpi* Rehm, Ascom. Philipp. in Philipp. Journ. of Sci. VIII, 1913, p. 397. — Maculis hinc inde sparsis, orbicularibus vel difformibus, determinatis, arescenti-fuscis, zona obscura cinctis; stromatibus in centro macularum laxè aggregatis, matrici innatis, tumidulis, atris, nitentibus, subcarbonaceis, 1 mm. circ. latis; ascis subcylindræis, apice incrassato-rotundatis, basi modice attenuatis, pedicellatis, octosporis; sporidiis oblique monostichis, ellipsoideis, hyalinis, medio septatis, non constrictis, 15-18 \times 7-8. *Hab.* in foliis vivis *Pterocarpi* *indici* (Leguminosae), Kuala Lumpur, Malaya. — Nonnullis aliis speciebus jam editis ad hoc nov. gen. pertinent, de quibus cnfr. Th. et Syd. in l. c. 5315

SCIRRHODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 415. —Est *Scirrha* paraphysibus donata.

1. *Scirrhopodithis Cyperi* (Wakef.) Trott., *Scirrha Cyperi* Wakefield in 5316
Bull. Bot. Gard. Kew 1914, p. 158. — Stromatibus gregariis, oblongis, epidermide diu tectis, dein erumpentibus, atris, 1-4 mm. longis, ostiolis prominentibus; peritheciis in seriem linearem unicam vel duplam dispositis, 200 μ usque diam.; ascis clavatis, 65-75 \times 8-9, octosporis; paraphysibus filiformibus; sporidiis subdistichis, hyalinis, fusoides, subcurvulis, primo guttulatis dein 1-septatis, ad septa non vel vix constrictis, 17-18 \times 4.

Hab. in caulibus foliisque *Cyperi polystachyi* (Cyperaceae), Nudgee, Queensland (C. F. WHITE).

2. *Scirrhopodithis seriata* (Syd. et Butl.) Th. et Syd., Ann. Mycol. 13., 5317
1915, p. 416, *Scirrha seriata* Syd. et Butl., Ann. Mycol. IX, 1911, p. 402. — Stromatibus epiphyllis, amoene longitrossum seriatis, erumpentibus, atro-brunneis, oblongis, 1-2 mm. long. ca. $\frac{1}{4}$ $\frac{1}{3}$ mm. latis, matrice fissa cinctis, intus minute plurilocularibus; ascis clavatis, 48-66 \times 11-15, octosporis; paraphysibus sparsis, septatis, filiformibus; sporidiis distichis, fusoides, utrinque leniter attenuatis, medio 1-septatis et constrictis, hyalinis, 20-22 \times 5,5-6,5.

Hab. in foliis *Bambusae* sp. (Graminaceae), Moumein Burma, Indiae or. (E. J. BUTLER). — A *S. bambusina* Penz. et Sacc. et *S. luzonensis* P. Henn. diversa.

3. *Scirrhopodithis Bambusae* (Turc.) Trott., *Scirrha Bambusae* Turconi 5318
in Rendic. Acc. Lincei, di Sc., ser. 5., XXV, 1°, p. 531 (1916) et in Atti Ist. Bot. Pavia XVI (1916) p. 251, tab. XVIII. — Stromatibus ellipsoideo-elongatis, sublinearibus, 1-2 mm. longis, 0,5-1 mm. latis, gregariis, quandoque longitrossum seriatis, tectis dein rimose erumpentibus, atris; loculis in quoque stromate numerosis, plerumque 2-3-seriatis, subglobosis vel ovatis, 180-200 μ diam., cum stromatis substantia continuis vel vix discretis, ostiolis parum perspicuis vel brevissime prominulo-papillatis; ascis cylindraceo-clavatis, superne obtuse rotundatis, inferne subattenuatis ac breve crasseque stipitatis, paraphysibus filiformibus guttulatis obvallatis, octosporis; sporidiis distichis vel oblique monostichis, oblongo-clavatis, deorsum attenuatis ac plus minusve curvatis, prope basim distincte 1-septatis, ad septum non vel leniter constrictis, granulosis, guttulatis, hyalinis 20-24 \times 8-12. Status conidicus *Melanconium Bambusae* Turc., quod confer.

Hab. in culmis ramulisque *Bambusae mitis*, nigrae,

gracilis, quos vexat, in horto bot. Ticinensi, Papiæ, Ital. bor.

APIOSPORA Sacc. - Syll. I p. 539, IX p. 659, XI p. 301, XIV p. 534, XVI p. 477, XVII p. 658, XXII p. 160. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 419.

1. **Apiospora indica** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 420. — 5319
Stromatibus 1-1,5 mm. long 180-240 μ lat., rimula anguste lineari dehiscentibus; peritheciis seu loculis spinutis, depresso globosis 110-120 μ lat., 80-90 μ altis; ascis clavatis aparaphysatis, 75-100 \times 18-24; sporidiis oblique 1-2-stichis, rectis curvulisve, subclavatis, hyalinis, 22-27 μ long., superne 7-9 μ cr. cellula inf 5-10 μ longa, ad septum non v. vix constrictis.

Hab. in foliis *Bambusæ* sp. (Graminaceæ), Wynaad, Ind. orient. (BUTLER). — *Ap. Montagnei* affinis.

2. **Apiospora carbonacea** Rehm, Ascom. Philippin. VIII. in Leafst. of 5320
Philippin. Bot. VIII, 1916, p. 2945. — Perithecia gregaria, cortici innata, mox denudata ab eaque ad basim marginata, e lata basi conoidea, breviter papillulata, glabra, atra, carbonacea, 1-1,2 mm. lata, 1 mm. alta; ascis cylindracei, 130-12,8-spori-I; sporæ cylindraceæ, utrinque rotundatæ, rectæ, hyalinae, inaequaliter 2-cellulares, ad septum non constrictæ, cellula superiore 17 μ inferiore 10 μ longa 5 μ lata, hyalinae, distichæ, paraphyses filiformes creberrimæ 1-2 μ latae.

Hab. ad *Schizostachyum* (Graminaceæ) emortuum in cacumine Mt. Maquiling, Ins. Philipp. (C. F. BAKER). — Ab *Apiospora* imprimis peritheciis magnis carbonaceis recedit.

3. **Apiospora Rubi-fruticosi** Severini, Ann. di Botanica v. XI, an. 1913, 5321
p. 195. — Peritheciis laxè gregariis seriatis, tectis, globosis, peridermio pustulato innatis, atris, nitidis, brevissime papillulatis, 0,3-0,5 mm. diam.; ascis cylindraceis, subsessilibus, paraphysatis, 140-150 \times 9-9,5, octosporis; sporidiis oblique monostichis v. distichis. piriformibus, rectis v. curvulis utrinque acutiusculis, hyalinis, 30-35 \times 6-7, prope basim uniseptatis, ad septum vix constrictis, loculo inferiore circiter 9 μ longo.

Hab. in sarmentis *Rubi fruticosi* (Rosaceæ), in silva S. Dominici (Perusia), Italiae Centr.

STIGMOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 580. — Loculi mesophyllo immersi, discreti v. pauci aggregati, clypeo epidermali tecti. Asci paraphysati, octospori. Sporidia hyalina unisept-

tata, loculo inferiore minuto. — Typ. gen.:

1. **Stigmochora controversa** (Starb.) Th. et Syd., l. c., *Apiospora controversa* Starb., Syll. XXII p. 161, *Dothidella controversa* (Starb.) Speg. — Myc. Argent. VI, in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 95 — *Dothidella? platyasca* Speg. — Syll. XXII, p. 432. — ? *Phyllachora timbo* Rehm — Syll. XIV p. 669.

Hab. in foliis vivis *Pithecolobii scalaris* (Leguminosae), S. Lorenzo, Argentina. — Cnfr. Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 560 et 580, tab. IV fig. 2-3, V fig. 7.

2. **Stigmochora Ulei** Syd., Ann. Mycol. 14., 1916, p. 84. — *Stromatibus* epiphyllis, per superficiem foliorum ex toto vel per magnam partem fuscidule decoloratorum plus minus aequaliter distributis, orbicularibus, 350-400 μ diam., atris, nitidis, conice convexis, unilocularibus; loculis lenticularibus vel applanato-globosis, 200-320 μ latis, 120-160 μ altis, pariete laterali tenui basali parum crassiore, 6-10 μ crasso; clypeo epidermali, 30-40 μ crasso, opaco; ascis fusoido-clavatis, mucose paraphysatis, 55-70 \times 12-17, octosporis; sporidiis 2-3-stichis, oblongis, rectis vel leniter inaequilateris, hyalinis, utrinque lenissime attenuatis, sed apicibus obtusis, totis 18-20 \times 5,5-7, loculo infero 4-5 μ tantum longo et lato. haud constrictis.

Hab. in foliis *Pithecolobii lindsaeifolii*, Mamaos, Rio Negro, Brasilia (E. ULE).

COCCOCHORELLA v Höhn., Fragm. z. Mykol. X, 1910, n. 500. — Theissen et Sydow, Ann. Mycol. 13., 1915, p. 581. — Stroma totam crassitudinem folii occupans et tunc utrinque visibile, clypeo epidermico tecto, pluriloculare. Asci paraphysati, octospori. Sporidia bilocularia loculo super majori brunneo, inferiori papilliformi, hyalino. — Typ. gen.:

1. **Coccochorella quercicola** (P. Henn.) v. Höhn., *Auerswaldia quercicola* P. Henn., Syll. XVII p. 843.

ENDODOTHELLA Theiss. et Syd., Ann. Mycol., 1915, p. 582. — Stromata ut in *Phyllachora*, paraphyses praesentes; sporidia hyalina bilocularia.

1. **Endodothella Liteae** Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 588, tab. IV fig. 10. — *Stromatibus* irregulariter sparsis, ovoideis v rotundatis 1-2 mm. latis nigris, supra nitidis et depresso convexis, zona viridi-flava usque 2 mm. lata circumdati, loculis 5-12 in quoque stromate, raro rotundatis plerumque e mutua pres-

sione angulosis, ostiolo rotundato parum distincto praeditis, parietibus parum distinctis limitatis; paraphysibus filiformibus collabescentibus; ascis late cylindraceis, rectis, apice rotundatis, 110-130 \times 20-24, octosporis; sporidiis monostichis, ovoideis, utrinque rotundatis, 20-23 \times 8-10, bilocularibus, crasse tunicatis, medio non constrictis, loculis inaequilongis, uno 12-15 μ longo, altero 6-8 μ , tunica hyalina v. subgriseola praeditis.

Hab. in foliis *Litsea javanicae* (Lauraceae), Gedah in ins. Java (RACIBORSKI).

- 2 *Endodothella dispar* (Syd.) Syd. in Theiss. et Syd., Ann. Mycol. 13., 5326 1915, p. 584, *Dothidella dispar* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 401. — Stromatibus amphigenis, innatis, utrinque visibilibus, sparsis, rotundatis usque oblongis, minutis, $\frac{1}{5}$ $\frac{3}{4}$ mm. longis, atris, planis; loculis minutis, paucis; ascis cylindraceis v. clavato-cylindraceis, subsessilibus, octosporis, 45-55 \times 9-13, apapophysatis (?); sporidiis distichis, fusoides, distincte 1 septatis, haud constrictis, 11-14 \times 4, loculis inaequalibus, superiore majore ca. 9 μ longo, inferiore 4-5 μ longo.

Hab. in foliis *Andropogonis contorti* (Graminaceae), Tellicherry Malabar, Indiae or. (E. J. BUTLER).

3. *Endodothella Bambusae* (Rabh.) Theiss et Syd., Ann. Mycol. 13., 5327 1915, p. 585, *Physalospora Bambusae* (Rabh.) Sacc., Syll. I p. 446. — Syn. *Dothidella bambusicola* Syd. et Butl., Ann. Mycol. IX, 1911, p. 401.

Hab. in foliis *Bambusae* sp. (Graminaceae), Moulmein Burma, Indiae or. (E. J. BUTLER).

4. *Endodothella Albizziae* (Syd.) Syd. in Theiss. et Syd., Ann. Mycol. 5328 13., 1915, p. 590, *Dothidella Albizziae* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 280. — Stromatibus epiphyllis, sparsis, rotundatis, minutissimis, 0,2-0,5 mm. diam., atris, intus plerumque 1-locularibus, raro 2-locularibus; ascis clavatis, apice rotundatis, 55-75 \times 14-19, octosporis; sporidiis oblique monostichis vel distichis, ellipsoideis, utrinque late rotundatis, medio 1-septatis et valde constrictis, primo hyalinis, tandem? dilutissime fuscis, 12-16 \times 5-6.

Hab. in foliis vivis *Albizziae marginatae* (Leguminosae), Luzon, Prov. Nueva Ecija, ins. Philipp.

- Endodothella Rickii* Theiss. et Syd. Ann. Mycol. 14., 1916, p. 449. — 5329 Stromatibus amphigenis; 0,5-1 cm. lat. subrotundis v. irregularibus, minutis, 0,5-1 mm. lat., confluyendo amplioribus, saepe nervi-

sequiis nitidulis, 1-paucilocularibus; clypeo amphigeno 20-30 μ cr. opaco; loculis saepe toto folio immersis, 175-300 \times 120-200, pariete atro brunneo 12-14 μ crasso; ascis paraphysatis, tereti-clavatis, breviter stipitatis, octosporis, 65-80 \times 15-18; sporidiis oblique monostichis v. distichis, oblongis v. fusioideis, hyalinis, pro parte 1-lo-
cularibus et pro parte obsolete bilocularibus, 20-22 \times 5-6.

Hab. in foliis 12-15 ca. long. et 7-8 cm. lat., margine integris et pilosis, *Leguminosae* indet., Isola S. Francisco, Brasiliae (DR. RICK).

6. *Endodothella leptosperma* Syd., Ann. Mycol. 14., 1916, p. 85. — Stro- 5330
matibus amphigenis, copiose per folium distributis, irregularibus nervulis limitatis, hinc fere semper angulatis, zonula flavidula cinctis atris, nitidulis, 1.5-4 mm. diam.; clypeo epidermali, amphigeno, 12-20 μ crasso, extenso; loculis numerosis in quoque stromate, applanato-globosis, 180-250 μ latis, 160-180 μ altis, totam folii crassitudinem occupantibus, parietibus brunneis ca. 10 μ crassis; ascis paraphysatis, fusioideis, sessilibus, 45-70 \times 9-13, octosporis; sporidiis tristichis, angustissime fusioideis, utrinque attenuatis, rectis vel curvatis, medio 1-septatis, 34-38 \times 3.

Hab. in foliis *Meliaceae* (?), Seringal, S. Francisco, Rio Acre, Brasilia (E. ULE).

7. *Endodothella Picramniae* (Syd.) Syd. in Theiss. et Syd., Ann. Mycol. 5331
13., 1915, p. 590. *Dothidella Picramniae* H. et P. Sydow, Ann. Mycol. XI 1913, p. 266. — Rehm, Ascom. 2073; Sydow, Fungi exot. 134. — Stromatibus in utraque foliorum pagina conspicuis, sparsis orbicularibus, planis, 1-3 mm. diam.; loculis numerosis, minutis, parum prominulis; ascis cylindraceo-clavatis, saepe curvatis, octosporis, 40-55 \times 7-10; sporidiis oblique monostichis usque distichis, fusiformibus, utrinque acutis, medio 1-septatis, non constrictis, hyalinis, 14-16 \times 3.5-4.5.

Hab. in foliis *Picramniae Bonplandianae* (Simarubaceae), San José, Costa Rica (A. TONDUZ).

OLIGOSTROMA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 265 (Etym. *oligos* paucus et *stroma*). — Stroma in epidermide situm. Perithecia (vel potius loculi) sub epidermide sita, solitaria, globulosa, immersa, pariete bene evoluto, ostiolo haud typico praesente. Asci paraphysati. Sporidia hyalina vel subhyalina. — Est quasi *Phyllachora* hyalodidyma paraphysata.

1. *Oligostroma Proteae* Sydow, l. c. p. 265. — Stromate amphigeno, pla- 5332

gulas atras irregulares subinde confluentes 1-5 mm. longas planiusculas efficiente, in epidermide sito, atro; loculis peritheciiformibus solitarie sub epidermide sitis, omnino immersis, sed haud folium penetrantibus, globosis vel ovato-globosis, 100-120 μ diam., pariete bene evoluto, ostiolo haud typico; ascis sessilibus, cylindraceo-clavatis vel clavatis, apice rotundatis, 75-100 \times 16-20, apophysatis, 4-6-sporis; sporidiis oblique monostichis usque distichis, oblongo-cuneatis, supra medium 1-septatis, non constrictis, totis 24-28 μ longis, loculo superiore brevior sed latiore rotundato vel ovato 8-10 μ longo, 8-9 μ lato, inferiore longiore sed angustiore 15-19 \times 6-8, hyalinis vel subhyalinis.

Hab. in foliis *Proteae Flanaganii* (Proteaceae), Kentani Natal, Africa austr. (MISS PEGLER).

Sect. 4. Phaeodidymae

SYMPHAEOPHYMA Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 97. — Stromata superficialia, centro papillato-loculigera, ambitu sterilia, fimbriata, atra. Loculi difformes, prominuli, minuti. Asci constipati octospori. Sporidia didyma, fuliginea.

- 1 **Symphaeophyma subtropicale** Speg., loc. cit., fig. 91 — Maculis am- 5333
phigenis, repando-angulosis, 1-5 mm., subcallosis, fuscis; stromatibus hypophyllis, superficialibus, atris, opacis, contextu indistincto, ambitu fimbriatis, ex hyphis repentibus radiantibusque, ramulosis, crebre septulatis, fuliginis; loculis 1-10 gregariis in centro stromatis, prominulis, saepius discretis, difformibus, minutis, 120-180 μ diam., astomis, exsepulo atro-carbonaceo, nucleo e hyalino olivascens; ascis clavulatis, breviter pedicellatis, 90 \times 20, pulpa subgelatinosa superne olivascens immersis; sporidiis leniter subclavulatis, utrinque obtusissimis, medio 1-septato-constrictis, diu hyalinis serius fuliginis, 25-28 \times 11-12, loculis subaequalibus, grosse 1-guttulatis.

Hab. in foliis vivis *Lucumae neriifoliae* (Sapotaceae), prope Bompland, Argentina.

COCCOCHORA v. Höhn., Fragm. z. Mykol. IX, 1909, n. 444, X n. 500. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 368. — Est *Trabutia* paraphysibus donata, sporidiis phaeodidymis. — Typ. gen.:

1. **Coccochora Kusanoi** (P. Henn.) v. Höhn., l. c., *Dothidella Kusanoi* 5334
P. Henn., Syll. XVII p. 850.

2. *Coccochora Rubi* Davis, Parasits Fungi Wisconsin, V, Trans. Wis. 5335

Ac. of Sc. etc. XIX, 1919, P. II, p. 696. — Stomatibus epiphyllis sparsis, nigris, nitidis, prominentibus, suborbicularibus, subcuticularibus 0,25-1 mm. diam.; localis 1-v. plurimis 40-60 μ altis 60-90 μ latis, apice dehiscentibus; ascis cylindraceis plus v minus curvis, 45-50 \times 7-9, octosporis; sporis brunneis, oblongo-clavatis, sub medio septatis, non constrictis, 11-15 \times 4-6; paraphysibus filiformibus inconspicuis.

Hab. in foliis *Rubi hispidi* (Rosaceae), Millston, Wisconsin, Amer. boreali.

THYRIOPSIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 369 — Stroma subcuticulare, tectum, supra carbonaceum, intus totum molliusculum laeticolor fibrosum, hypothecio homogeno; loculis immersis; ascis aparaphysatis octosporis; sporidiis phaeodidymis. — Typ. gen.:

1. *Thyriopsis halepensis* (Cooke) Theiss. et Syd., l. c. p. 369, *Dothidea* 5336
halepensis Cooke, Syll. II p. 642. — Huc ducendum est *Dothiotypeolum pinastri* v Höhn. nov. gen. et sp. in Jaap « Fungi sel. exsicc. » n. 742, an. 1915; Verh. bot. Ver. Prov. Brandb. 59., 1917, p. 29. Cnfr. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 433.

PHAEODOTHIOPSIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 192; 13., 1915, p. 410. — Stroma inter epidermidem et mesophyllum positum, clypeo epidermali tectum. — Typ. gen.:

1. *Phaeodothiopsis Zollingeri* (Mont. et Berk.) Th. et Syd., l. c., *Dothidea* 5337
della Zollingeri (Mont. et Berk.) Sacc., Syll. II, p. 632. — Etc.
2. *Phaeodothiopsis Eupatorii* F. L. Stevens, Bot. Gazette 69., 1920, p. 5338
252, tab. XIV fig. 16-17. — Maculis clypeum non excedentibus; stromatibus numerosis, rotundatis, 1-4 mm. diam., nigris ob perithecia rugosis, plerumque epiphyllis, primum epidermicis demum subepidermicis et in mesophyllo evolutis; loculis rotundatis v. lenticularibus 100-250 μ diam., 80 μ altis; ascis cylindraceis circ. 110 \times 17, octosporis, inordinatis; sporidiis uniseptatis, loculis inaequalibus, maturitate brunneis, 20 \times 7; paraphysibus filiformibus ramosis.

Hab. in foliis *Eupatorii portoricensis* (Compositae), Dos Bocas prope Utuada, Porto Rico.

3. *Phaeodothiopsis Stryphnodendri* (P. Henn.) Th. et Syd., l. c., *Dothidea* 5339
Stryphnodendri P. Henn., Hedw. vol. 48. (1908) p. 9. — Stomatibus epiphyllis, erumpenti-superficialibus, gregariis, pulvinatis, rugulosis, atro-carbonaceis, 0,5-1 mm. diam.; loculis immersis, globulosis, fu-

seis, obtuso-ostiolatis; ascis cylindraceis, vertice obtuse rotundatis, octosporis, $45-55 \times 4-6$; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, medio 1-septatis, constrictis, fuscis, $9-10 \times 4-5$.

Hab. in foliis *Stryphnodendri Barbatiani* (Leguminosae), Morro Pellado, S. Paulo, Brasilia.

4. **Phaeodothis Pterocarp** H. S. Jates, F. from Brit. N. Borneo, in Philipp. Journ. of Sc. Bot. v. 13., 1918, p. 237. — Stromatibus epiphyllis, numerosis ca. $0,5-1,5$ mm. diam., dispersis, carbonaceis, hemisphaerico-pulvinatis, laevibus, atris, in maculis fusciculis, $2-3$ mm diam. dispositis; loculis ca. $6-12$, $80-120 \mu$ diam., globosis; ascis cylindraceis, $50-60 \times 10$, 8-sporis, paraphysatis; sporidiis distichis oblongis, utrinque rotundatis, brunneis, ad basim 1-septato-constrictis, cellula superiore $10 \times 12,5$ inferiore $3-4 \times 3$.

Hab. in foliis *Pterocarp* indici (Leguminosae), Tenom, in ins. Borneo bor. — Socia *Meliola Pterocarpiae* Yat.

PHAEODOTHIS Syd. — Syll. XVII p. 854, XXII p. 436.

1. **Phaeodothis Gigantochloae** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2223. — Stromatibus culmo innatis, convexis, orbicularibus vel ellipsoideis, $1-3$ mm. longis, $1,5$ latis, 1 mm. altis, extus fusco-inquinatis, intus fulvo-rubidulis, papillulis nullis conspicuis; loculis $6-8$, monostichis, globulosis, 100μ diam., arcte congregatis, tenuissime membranaceo-contextis; ascis ellipsoideis, demum cylindraceis, octosporis, aparaphysatis; sporidiis distichis, fusiformibus, utrinque acutatis, medio septatis constrictisque, subfuscis, $15-18 \times 5-6$.

Hab. in culmo *Gigantochloae* emortuo (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 185 et p. 598 ad Sphaeriaceas pertinet et potius ut syn. *Rhopographi hysterioidis* (Ces.) Sacc. et *Didymosphaeriae striatulae* Penz. et Sacc. habendum.

2. **Phaeodothis Tristachyae** P. et H. Syd., Ann. Mycol. X, 1912, p. 41. — Stromatibus amphigenis, sparsis v. paucis seriatis, oblongis v. linearibus, $0,5-1$ mm. long., planis, atris, opacis, innatis; loculis numerosis, minutis, $100-150 \mu$ diam.; ascis cylindraceis, apice obtusiusculis, $45-70 \times 6-12$, octosporis, paraphysibus numerosis filiformibus obvallatis; sporidiis monostichis usque distichis, fusiformibus, medio 1-septatis, non v. parum constrictis, olivaceo-brunneis, $12-13,5 \times 3-4$, quaque cellula $1-2$ guttulata.

Hab. in foliis *Tristachyae leucothricis* (Gramina-

ceae), Mooi River, Natal (J. B. DAVY). — *Phaeod. Tricuspidis* Syd. proxima sed differt stromatibus sporidiisque minoribus.

3. *Phaeodothis sparsa* Petch, Ann R. Bot. Gard. Peradeniya, v. VI, P. III, 5343 1917, p. 227. — Maculis parvis, flavis; stromatibus epiphyllis, saepius solitariis, irregulariter ovalibus, $0,5-0,9 \times 0,3-0,4$ mm., pulvinatis, 2-4-locularibus, ostiolis inconspicuis; ascis clavatis, octosporis, parte sporifera $10-60 \times 9-10$; sporidiis oblongo-ovoideis, truncatis, inaequaliter uniseptatis, non constrictis, fusco-viridibus, $8-10 \times 4-5$; conidiis nigris, lenticularibus, rotundatis vel angulatis $4-5 \mu$ diam.

Hab. in foliis *Acaciae caesia* (Leguminosae), Peradeniya, Ceylon.

4. *Phaeodothis Apuleiae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 95. — Maculis nullis sed foliis ad hypophyllum bulloso-concaviusculis; stromatibus epiphyllis, laxe gregariis, suborbicularibus, $0,5-2$ mm. diam., verruculosi, atris, opacis, 3-10-loculigeris; loculis valde prominulis, minutis, subglobosis, $120-150 \mu$ diam., astomis, irregulariter dehiscentibus; ascis e cylindraceo subclavulatis, breviuscule attenuato-pedicellatis, paraphysatis, $60-70 \times 12-18$; sporidiis recte distichis vel oblique monostichis, subobovatis, utrinque subtruncatis, parum infra medium 1-septatis, non vel vix constrictis, fuliginosis, $11-12 \times 6$, loculis inaequalibus, superiore longiore, crassiore obtusioreque, grosse 1-guttulatis.

Hab. in foliis vivis *Apuleiae praecocis* (Leguminosae), prope Bompland, Argentina.

5. *Phaeodothis polystoma* Sydow, Ann. Mycol. 18., 1920, p. 101. — Stromata epiphylla, maculis brunneolis subtus centro sordide albidis insidentia, orbicularia vel ambitu irregularia, $3-5$ mm. diam., atra, parum elevata, superficie ob loculos copiosos dense dispositos undulata, parum nitentia; loculi copiosissimi, $150-200 \mu$ alti, $180-220 \mu$ lati, fere totam folii crassitudinem occupantes, pariete brunneolo ubique evoluto $18-22 \mu$ lato; clypeo tantum epiphylo $25-30 \mu$ crasso; ascis cylindracei, $80-90 \times 11-15$, stipitati, octospori, paraphysati; spora distichae, oblongae, intense olivaceo-fuscae, 1-septatae medio non vel parum constrictae, $18-22 \times 3,5-5$.

Hab. in foliis *Derridis* spec. (Leguminosae), Mt. Maquiling, prov. Laguna, Ins. Philippin. (T. COLLADO).

6. *Phaeodothis Grovei* Sacc., Notae Mycol. XX, Nuovo Giorn. Bot. It. 23., 1916, p. 223. — Stromatibus epiphyllis, subcircularibus, gre-

gariis, 1,5-3 mm. diam irregulari-subcircularibus, saepe confluentibus, innato-erumpentibus, applanatis, membranaceo-carbonaceis, intus nigris, extus atro-nitentibus, ex loculis prominulis creberrimis (sub vitro) punctulatis; loculis 40-50 in quoque stromate, globulosis, 40-50 μ diam., subastomis, rarius subumbilicatis; stromatis contextu parenchymatico fuligineo; ascis obovatis, dein breviter oblongis, apice rotundatis, basi obtuse tenuatis, subsessilibus, 35-45 10-14, primo mucro obvolutis; sporidiis 2-3-stichis, oblongis, utrinque rotundatis, medio constricto-1-septatis, guttulatis v nubilosis, 14-16 \times 6, olivaceis.

Hab. in foliis subvivis *Kennedyae* sp. (Leguminosae), Australia occid. (communicavit W. B. GROVE).

7. *Phaeodothis cladonema* (Wedd.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 597, *Buellia cladonema* Weddell, Lich. de Agde, p. 20, *Dothidea cladonema* (Wedd.) Vonaux, Bull. Soc. Mycol. Fr. 1912, p. 195. — Stromatibus lenticularibus valde applanatis, 0,2-1,2 mm. diam., immersis, saepe confluentibus; pseudoperitheciis ostiolatis 50-100 μ diam.; ascis cylindraceo-clavatis, breviter crasseque pedicellatis, octosporis, 44-63 \times 10-14; paraphysibus e basi valde ramosis, septatis, hyalinis 1,25-1,5 μ cr., cellula majori obscuriori terminatis; sporidiis distichis v. infra monostichis, brunneis, uniseptato-constrictulis, ovoideo-elongatis, loculo inferiori angustiori, 12-16 \times 5-6.

Hab. in thallo *Parmeliae Delisei* (Lichenes), Adge Herault Gallia (WEDDELL et A. DE CROZALS). — A *Doth. Lichenium* stromatibus immersis depressis praecipue differre videtur.

Sect. 5. Hyalophragmiaae

CAMAROTELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 370 (Etym. a *kamarotes* incurvatus). — Hypostroma epidermicum, hypothecium obscurum; paraphyses praesentes, sporidia hyalina quadrilocularia; caeterum ut in *Trabutia*. — Typ. gen.

1. *Camarotella Astrocaryae* (Rehm.) Theiss. et Syd., l. c., cum icon. 5348
Montagnella Astrocaryae Rehm, Syll. XIV p. 682.

PHRAGMOCAUMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 411. — Est *Catacauma*, paraphysata, sporidiis hyalinis quadrilocularibus donata. — Typ. gen.:

1. *Phragmocaulis viventis* (Oke.) Th. et Syd., l. c., *Phyllachora viventis* 5349
Oke.) Sacc., Syll. II p. 601. — Syn. *Homostegia Albizziae* (Oke.) Berl.
et Vogl., Syll. IX p. 1049.
2. *Phragmocaulis Kolowratiae* Syd., Ann. Mycol. 15., 1917, p. 225. — 5350
Stromata epiphylla, sparsa, discreta, 2-4 mm. diam., orbicularia vel
suborbicularia, nitidula leniter convexa, stromate parco sterili saepe
in hypophyllo evoluta, loculi numerosi in quoque stromate, 100-160 μ
lati et alti; clypeo opaco aterrimo 20-25 μ crasso, parietibus late-
ralibus 10-12 μ crassis brunneis; asci cylindranei vel cylindraceo-
clavati, breviter stipitati, 8-spori, 90-115 \times 10-15, parces paraphy-
sati; sporae plerumque distichae, fusoidae, 3-septatae, non con-
strictae, 22-26 \times 4,5-5, quaque cellula guttulata, hyalinae.

Hab. in foliis *Kolowratiae elegantis* (Zingiberaceae),
prov. Rizal Luzon, Ins. Philipp. (H. S. JATES).

SCIRRHOFRAGMA Theiss. et Syd., Ann. Mycol. 13., 1915. p. 423. —
Stroma ut in *Scirrha*; paraphyses praesentes; sporidia hyalina
trilocularia. — Typ. gen.:

1. *Scirrhophragma regalis* Th. et Syd., l. c. — Stromatibus copiosis cau- 5351
licolis elongatis, linearibus, 1-2 mm. long. 200 μ cr., epidermidem
demum nigricantem elevantibus; stromate in cortice evoluta ex
hyphis parallele dispositis septatis brunneo-olivaceis 6-7 μ cr. effor-
mato supra a clypeo opaco-nigro tecto; loculis rotundatis longi-
tudinaliter seriatis, 150-170 μ diam., parietibus propriis destitutis;
ascis parietalibus cylindraneis, breviter pedicellatis 80 90 \times 8-9; pa-
raphysibus copiosis tenuissimis; sporidiis distichis, hyalinis, elon-
gatis 3-locularibus, 14-16 \times 4, utrinque rotundatis, loculis inaequa-
libus praeditis.

Hab. in caulibus *Osmundae regalis* (Filices), Sperenberg
in Brandenburgia, Germania (H. SYDOW).

EXARMIDIUM Karst. — Syll. II, p. 648 (ut subgenus). — Theiss. et
Syd., Ann. Mycol. 13., 1915, p. 424.

1. *Exarimidium blumeianum* (Rehm) Th. et Syd., Ann. Mycol. 13., 1915, 5352
p. 425, *Rhopographus blumeianus* Rehm, Ascomyc. Philipp. IV, Lea-
flets of Philipp. Botany VI (1913) p. 1936. — Stromatibus in cor-
tice culmi primitus areolatis, 2 mm. circ. latis, mox lineariter con-
fluentibus, denique connatis, cortice longe lateque nigrofuscata in-
natis; peritheciis monostichis, areolatim 10-12 arete congregatis,
globulosis, 100 μ diam., peridermio mox semiglobose dein lineariter

1 mm. longe elato, hyalino obtectis, demum eo laciniatim perrupto denudatis; ascis fusiformibus, octosporis, 80-100 \times 10-12; paraphysibus filiformibus, hyalinis, septatis, 2 μ cr.; sporidiis parallele dispositis, elongato-fusiformibus, apice superiore obtuso, inferiore sub-acuto, rectis, 7-9-septatis, guttulatis, hyalinis, 55 \times 2,5-3.

Hab. in *Bambusa blumeana* (Graminaceae) emortua, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

2. *Exarmidium Paolii* Baccarini, Eumyc. Somalia it., in « Missione Stefanini-Paoli » Firenze 1916, p. 196. — Stromatibus superficialibus in ligno decorticato insidentibus prominulis ac lineariter colliculosis; ad 3 ad 6 mm. et ultra longis, ad 1 mm. latis, gregariis ac saepe confluentibus; loculis uniseriatis 39-96 μ latis 39,2 μ crassis; ascis obovatis, sessilibus, paraphysatis, 12 \times 25; sporis cylindrico-ellipsoideis, 11,2 \times 3,3, primitus continuis denique triseptatis hyalis, quaternis (?)

Hab. in ligno emortuo decorticato, Solàgle, et Bur Eghórta, socia *Gloniopsis somala*, Somalia it., Africae trop. (PAOLI).

RHOPOGRAPHELLA P. Henn. — Syll. XVII p. 858 (ut subg.), XXII p. 440. — De hoc gen. cnfr. Theissen et Sydow (Ann. Myc. 13., 1915, p. 428). Typus gen. *Rh. Gaduae* P. Henn. (Syll. XVII p. 858) sec. v. Höhnelt (Fragm. 615) ad *Calosporam* pertinet (Valsaceae), nec non *Rh. Gynerii* P. Henn., *Rh. clavisporus* (C. et Pk.) Sacc. et *Rh. Taquarae* Rehm.

1. *Rhopographella reyesiana* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2224. — Stromatibus plurimis innatis, plerumque arcte parallelis, interdum subcurvatis, 0,5-2 cm. longis, 1 mm. latis, peridermium striiformiter elatum longitudinaliter rimose perforantibus, extus intusque nigris, ostioliis minimis demum conspicuis; loculis plurimis monostiche innatis, globulosis, tenuissime parenchymatice contextis, 120 μ latis; ascis clavatis, apice rotundatis, octosporis, 50 \times 10; paraphysibus non conspicuis; sporidiis oblongo-fusoides, utrinque acutatis, rectis, 1-dein 3-septatis, guttatis, non constrictis, hyalinis dein fuscidulis (mens. desunt).

Hab. in culmo emortuo *Bambusa blumeanae* (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES). — Intra rimas corticis hyphae torulosae fasciculatae, rectae, obtusae, septatae, fuscae progrediuntur.

- var. *Gigantochloae* Rehm, loc. cit. — Stromatibus primitus plerumque orbicularibus, minus arcte regulariter parallelis et striiformiter

seriatis, 0,5-1 mm. latis, ostiolis perspicue prominentibus, paraphysibus filiformibus.

Hab. in *Gigantochloa* (Gramin.), cum praecedente.—*Rhopographus hysterioides* (Ces.) Sacc., Syll. II p. 648, ad calamos Bambusae, descriptione hymenii plane carens, ceterum simillimus videtur.

2. *Rhopographella Ochlandrae* Petch, Ann. R. Bot. Gard. Peradeniya, 5355 v. VI, P. III, 1917, p. 228. — Stromatibus maculis flavis congestis, saepius hypophyllis, erumpentibus, nigris, rugosis, pulvinatis, peritheciis interdum subprominentibus, ostiolis non prominentibus; peritheciis circa 0,1 mm. diam., 2-3 in quoque stromate; ascis late clavatis vel ovalibus, pariete crasso, 4(?) sporis; sporis parallelis, fusoides vel subcymbiformibus, hyalinis, triseptatis, $28-36 \times 3$; paraphysibus linearibus, flexuosis, brevibus; pycnosporis hyalinis falcatis, vel varie curvatis, triseptatis, $32-70 \times 3$.

Hab. in foliis vivis *Ochlandrae stridulae* (Graminaceae), Gikiyanakande, Ceylon.

TELIMENA Rac. — Syll. XVI p. 631.

1. *Telimena Panici* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 600.— 5356 Stromatibus crebre sparsis, parvis, utrinque visibilibus, opace nigris, prominulis, ostiolis hypophyllis praeditis, ovato-ellipsoideis, superficie zigrinata ostiolata; loculis parum numerosis, globosis, $140-170 \mu$ diam., folium percurrentibus, supra et infra clypeo epidermoidali effuso tectis; ascis cylindraceis, sparse paraphysatis, breviter pedicellatis, $48-52 \times 7-8$, octosporis; sporidiis plerumque distichis, elongatis, utrinque parum angustatis non acutatis, quadrilocularibus, hyalinis, $11-13,5 \times 3$, loculis mediis plerumque brevioribus.

Hab. in foliis *Panici patentis* (Graminaceae), Luzon, prov. Laguna, Ins. Philipp. (MERRILL).—Sydow, Fungi exot. exs. n. 266 sub *Phyll. stenospora* (B. et Br.) Sacc.

2. *Telimena graminella* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 565.— 5357 Stromatibus in utraque foliorum pagina conspicuis, omnino innatis, phyllachoroideis, sparsis, ellipticis vel oblongis, 1-2,5 mm. longis, 1 mm. latis, atris, opacis, minute plurilocularibus; ascis cylindraceis, ad apicem obtusis, $65-100 \times 8-11$, octosporis; paraphysibus paucis, sed distinctis, hyalinis, filiformibus, 1μ crassis; sporidiis distichis, exacte fusiformibus, utrinque attenuatis, rectis vel leniter curvatis, hyalinis, 3-septatis, guttulatis, $20-25 \times 4-5$, loculis extimis quam duobus interioribus duplo vel triplo longioribus.

Hab. in foliis *Paspali* sp. (Graminaceae), Angat prov. Bulacan, ins. Philippin. (M. RAMOS).

3. *Telimenella Bakeri* Syd., Ann. Mycol., 15., 1917, p. 228. — Stromata 5358
folio saepe late decolorato innata, sparsa vel pauca striaeformiter collecta, saepe etiam in macula minuta flavida solitarie evoluta, epiphylla, parum prominula, elliptica, atra, minutissima et $\frac{1}{2}$ mm. diam., usque 1,5 mm longa, opaca, loculos 1-3 includentia in hypophyllo etiam conspicua; asci cylindraceo-clavati, paraphysati, 70-90 \times 12-14, octospori; sporae oblique monostichae vel distichae, fusoidae, utrinque acutae, rectae, 3-septatae, non constrictae, 24-28 \times 4-7, hyalinae.

Hab. in foliis *Schizostachyi* sp. (Graminaceae), in summo vertice Mt. Maquiling Laguna, Ins. Philipp. (C. F. BAKER).

4. *Telimenella encaustica* (Nyl.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5359
p. 599, *Homostegia encaustica* (Nyl.) Vouaux, Bull. Soc. Mycol. Fr. 1912, p. 197, *Epiphora encaustica* Nyl. in Flora, 1876, p. 238. — Stromatibus maculis nigris superficialibus simulantibus, demum plus minus effusis, 200-600 μ crassis e contextu hyphenchymatico efformatis, crebre ostiolatis; peritheciis plerumque bistratis, subsphaeroideis, 140-230 μ diam.; ascis clavatis pedicello longiusculo noduloso praeditis, apice rotundatis, tunica crassa praeditis, octosporis, 63-82 \times 13,5-16; paraphysibus numerosis, multiguttulatis, hyalinis filiformibus, parum septatis, ramosis, quandoque anastomosantibus, ascos longitudine superantibus, 1,5 μ cr.; sporis distichis v. tristichis, elongato-fusoides, utrinque plus minusve acutatis sed etiam obtusis, rectis v. leniter curvulis, hyalinis v. leniter flavidulis triseptatis, ad septa constrictulis vel non, 22-30 \times 3-5.

Hab. in thallo et apotheciis *Parmeliae encaustae* (Lichenes), Mont-dore, Gallia (LAMY).

PHRAGMOCARPELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 601. —

Est *Phyllachora* sporidiis hyalinis quadrilocularibus, acutis v. obtusis, paraphysibus carenti. — Typ. gen.:

1. *Phragmocarpella Ichnanthi* (P. Henn.) Th. et Syd., l. c., *Roumegueria* 5360
Ichnanthi P. Henn., Syll. XXII p. 437.
2. *Phragmocarpella Puiggari* (Speg.) Th. et Syd., l. c., *Montagnella?* Puig- 5361
gari Speg., Syll. IX p. 1048.
3. *Phragmocarpella fusispora* (Syd.) Syd. in Th. et Syd., l. c., *Homostegia* 5362
fusispora Syd., Syll. XXII p. 441.

Sect. 6. *Phaeophragmiae*

DERMATODOTHIS Racib. in Theiss. et H. Sydow, Ann. Mycol. XII 1914, p. 280; 13., 1915, p. 369. — Stroma *Trabutiae* inter cuticulam et epidermidem. Asci paraphysati octospori. Sporae brunneae, triloculares.

1. *Dermatodothis javanica* Racib. in Theiss. et H. Sydow l. c. p. 280. — 5363
Stromatibus epiphyllis, carbonaceis, depressis, rotundatis, 1-2.5 mm. latis, inter cuticulam et epidermidem efformatis; peritheciis semilenticularibus, 120-150 μ altis usque 300 μ latis, in stromate immersis, ostiolo punctiformi prominulo praeditis; paraphysibus filiformibus; ascis linearibus apice rotundatis 70-85 μ long. 8-10 μ latis, octosporis; sporidiis elongato-ovoideis 12-14 \times 3,5-4, transverse biseptatis et tunc trilocularibus, apice rotundatis, ad septa indistincte constrictis, levibus, dein pallide brunneis. Stratu pycnidico (*Hendersonia*) saepe eodem stromate consociato sed pycnidii magnitudine minoribus; sporulis ovoideis trilocularibus, 7 \times 3-4, ad septa constrictis apice sporophorum singulis ortis.

Hab. in foliis *Syploci* sp. (Symplocaceae), ad Pangerango supra Tjitjuruk, in ins. Java.

RHOPOGRAPHUS Nits. — Syll. II p. 647, XI p. 378, XVI p. 630, XVII p. 857. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 425.

1. *Rhopographus pusillus* Spegaz., Rel. Myc. trop. etc. in Bol. Ac. Nac. 5364
Cienc. Cordoba, t. 23., 1919, Extr. p. 132. — Stromata pusilla 100-150 \times 75-100 parenchymate innata ad epiphyllum plus minusve prominulo-manifesta, dense gregaria saepeque confluentia, atra glabra opaca, rimose dehiscentia, oculis difformibus pulpa alba faretis; ascis ellipticis breviter crasseque pedicellatis paraphysatis, 30-32 \times 10-15; sporis fusoides utrinque acutiusculis, 3-septatis, 16-22 \times 3-4.

Hab. ad ramos emortuos *Ilicis* ejusdam (Aquifoliaceae), Apiaby, Brasilia (J. PUIGGARI).

RHOPOGRAPHINA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 429. — Est *Rhopographus* paraphysibus destitutum; sporidiis pallidioribus — Typ. gen.:

1. *Rhopographina Chamaemori* (Rostr.) Th. et Syd., l. c., *Rhopographus* 5365
Chamaemori Rostr., Syll. XVII p. 857
2. *Rhopographina Palmarum* (v. Höhn.) Th. et Syd., l. c., *Rhopographus* 5366

Palmarum v. Höhn., Fragm. zur Mykol. 775, in Stzgsb. Akad. Wiss. Wien CXXI, 1., p. 393, fig 3 (1912). — Stromatibus elongatis, 200-300 \times 120, epidermidem pustulatin infantibus, in maculis minutis brunneis indistincte limitatis et saepe confluentibus gregariis, 1-locularibus, lateraliter rimose dehiscens; contextu stromatis minute parenchymatico, brunneo; ascis sessilibus, late clavatis, sursum rotundatis crasseque tunicatis, 35-54 \times 16-20; paraphysibus diffluentibus, gelatinosis, epithecium crassum hyalinum efformantibus; sporidiis polystichis, oblongo-clavulatis, 5-6-septatis, diu hyalinis dein luteis demumque brunneis, 15-19 \times 5-6, strato tenui mucoso obductis.

Hab. in foliis vivis *Phoenixis natalensis*, Tjibodas, Java (Rehm, Ascomyc. exs. n. 1944 sub *Monographus Palmarum*) — Species incertae sedis, ad *Gloniellam* vergens.

HOMOSTEGIA Fuck. — Syll. II p. 649, IX p. 1049, XIV p. 683, XVI p. 631, XVII p. 857, XXII, p. 440

1. *Homostegia Durionis* Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, 5367 p. 606. — Stromatibus rotundatis, nigris, in mesophyllo efformatis, 1-1,2 mm. latis, inter se 2-3 mm. remotis, vel usque 1-10 cm. rotundato-gregariis, in epiphyllis praecipue conspicuis, nitidis; loculis 2-4, depresso globosis raro globosis 110-130 μ alt., 115-240 μ latis, in epiphyllis minute ostiolatis, parietibus parum evolutis; paraphysibus filiformibus; ascis cylindraneo-clavatis, octosporis, 86-98 \times 16; sporidiis distichis, elongato-ovoideis, 28-32 \times 7, rectis v. curvulis, quadrilocularibus, parietibus brunneolis juventute levibus demum minute verrucosulis.

Hab. in foliis *Durionis zibethini* (Bombacaceae), prope Buitenzorg, Java (RACIBORSKI).

2. *Homostegia parasitica* Rehm, Ascom. n. 894, Hedw. 1887, p. 16 extr., 5368 Syll. IX p. 1050, Ann. Mycol. 13., 1915, p. 134 (diagn. ampliata). — Stromatibus superficialibus, nigris, applanatis, ambitu subcircularibus, 0,5-1 mm. diam., sed saepissime ob confluentiam angulatis, intus minute monostiche plurilocellatis, crebre minutissimeque ob ostiola punctulatis; ascis clavatis breviter crasseque stipitatis, 45-50 \times 9-11, octosporis, filiformi-paraphysatis; sporidiis distichis v. oblique monostichis, ellipsoideo-oblongis, utrinque acutulis, 14-16 \times 4,5-5, initio biserialiter guttulatis. dein 5-septatis non constrictis, ex olivaceo subhyalinis.

Hab. ad ramos decorticatos putres Corni sanguineae, parasitica in *Eutypae latae* stromate, prov. Rigny, Galliae (J. FLAGEOLET). — Specimina Flageoletiana optime evoluta cum diagnosi Rehmiana bene congruunt, non vero cum diagnosi *Bertiae parasiticae* H. Fabré quae fungus simplex est et non nisi loco convenit. (P. A. Sacc. in mns.).

3 **Homostegia Pterocarpi** Har. et Pat. in Bull. Mus. Hist. Nat. Paris 5369

1911, p. 368. — Epiphylla; stromatibus carbonaceis, pseudoparenchymaticis, in macula rufescente siccata sparsis, exiguis, 0,5 mm. circ. diam., convexis, initio nitidis, bullatis (loculis 1-2 in stromate singulo), fragilibus, facile friabilibus, nucleo brunneo, vix ostiolorum ope punctatis; nucleo ascis efformato subcylindricis, apice obtusis, basi attenuatis, $50 \times 8-10$; sporidiis octonis biseriatis cuneiformi-cylindræis, uno apice vix attenuatis, utrinque rotundatis, fuscis, transverse biseptatis, 10×4 ; paraphysibus indistinctis.

Hab. in foliis *Pterocarpi erinacei* (Leguminosae), Chari: Gribingui, Congo gallico. — Species critica de qua cnfr Theiss. et Syd., Ann. Mycol. 13., 1915, p. 608.

4. **Homostegia parmeliæ** (Jacz. et Elenkin) Vouaux, Bull. Soc. Mycol. 5370

1912, p. 198, *Trematosphaeriopsis parmeliæ* (Jacz.) Elenk., Lichens facultatifs p. 10 (rossice). — Stromatibus in thallo amphigenis nigris primum punctiformibus dein pulvinatis et 2 mm. diam. et ultra, parum depressis, contextu plectenchymatico; pseudoperitheciis immersis, ovoideis, piriformibus v. subsphaeroideis ostiolo simplici praeditis; ascis cylindricis, stipitatis, octosporis, $80-85 \times 16-20$; paraphysibus filiformibus numerosis; sporidiis distichis subhyalino-favidulis, fusoides, triseptatis, rectis v. curvulis, $30 \times 6-8$.

Hab. in thallo *Parmeliæ mollinseolæ* var. *vagantis* (Lichenes), Rossia (ELENKIN). — Cnfr. etiam Theiss. et Syd., Ann. Mycol. 13., 1915, p. 604.

5. **Homostegia lophiostomacea** (Rehm) Theiss. et Syd., Ann. Mycol. 13., 5371

1915, p. 606, *Auerswaldia (Phaeochora) lophiostomacea* Rehm, Ascomyc. Philipp. VI, Leaflets. of Philipp. Bot. v. VI, 1914, p. 2274. — Stromatibus cortice late atrato gregarie innatis eoq. obtectis, parallelis, forma *Lophiostomatis* innatis, anguste ellipsoideis, fere linearibus, 0,5 mm. longis, peridermium protuberantibus, medio paullum superantibus, vix disrumpentibus; loculis in stromate binis arcate congregatis, 150μ latis, ostioli non conspicuis; ascis clavatis, apice rotundatis, $90-120 \times 20$, paraphysibus?; sporidiis fusiformibus, utrinque acutatis, medio septatis, paullulo constrictis, rectis, cinereo-fu-

scidulis, $30 \times 6-8$.

Hab. in petiolo emortuo *Arengae sacchariferae* (Palmae), Los Baños, ins. Philipp. (S. A. REYES). — Ex subgen. *Phaeochora* v. Höhn.

6. *Homostegia Symploci* Racib. in Syd. et Theiss., Ann. Mycol. 13., 5372 1915, p. 606. — Stromatibus numerosis, irregulariter distributis, rotundatis, 1-2,5 mm. latis, rubro-nigris, macula nulla limitatis; loculis contertis depresso globosis, 160-210 μ latis 120-140 μ altis, minute vix prominenter ostiolatis; ascis cylindraceis, octosporis, $85-104 \times 11-14$; sporidiis fusoides, quadrilocularibus, utrinque lanceolato-acutatis, medio constrictulis, levibus, parietibus brunneis praeditis, $16-21 \times 4-5$.

Hab. in foliis *Symploci* sp. (Symplocaceae), Djasinga prope Buitenzorg, Java (RACIBORSKI).

CLYPEOSTROMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 609. — Est *Phyllachora*, paraphysibus destituta. sporidiis quadrilocularibus coloratis donata — Typ. gen.:

1. *Clypeostroma hemisphaericum* (Berk.) Theiss. et Syd., Ann. Mycol. 5373 13., 1915, p. 609, *Dothidea hemisphaerica* Berk., Syll. II p. 643, Syn. *Ooconia discoidea* (C. et M.) Sacc., Syll. X p. 50.

Sect. 7. Dictyosporae

DICTYOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 610. — Est *Phyllachora* paraphysibus destituta, sporidiis brunneis muralibus. — Typ. gen.

1. *Dictyochora Rumicis* (Karst.) Th. et Syd., Ann. Mycol. 13., 1915, 5374 p. 610, *Dothidella Rumicis* (Karst.) Sacc., Syll. II p. 630.
2. *Dictyochora Gambellii* Ch. F. Fairman, Mycologia 10., 1918, p. 106. — 5375 Stromatibus primum subepidermicis dein hysteriformiter erumpentibus cauliculis longitudinaliter distributis; loculis 2-9 aggregatis rotundatis v. mutua pressione subangulosis, nigris, 150-470 μ diam.; ascis clavato-cylindraceis, breviter stipitatis, $100 \times 10-12$; paraphysibus nullis; sporidiis oblique monostichis v. supra subdistichis, 5-7 septatis ad septa constrictulis, loculis terminalibus plerumque simplicibus, mediis muriformibus, fusoides-oblongis, brunneo-flavescentibus dein opacis, $20-27 \times 7-10$.

Hab. in caulibus emortuis *Zea mays*, « Gambel farms », N. Y. Amer. bor.

DICTYOCHORELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 610 (Etym. *dictyon* rete, cribrum, et *achor* ulcus). — Est *Dictyochora* paraphysibus praesentibus.

- 1 **Dictyochorella abscondita** Theiss. et Syd., l. c. p. 610. — Loculis fo- 5376
lio omnino immersis, clypeo 400-450 μ lato praeditis, indistincte ostiolatis; clypeo supra 20-25 μ infra 20-22 μ cr., parietibus lateralibus loculorum tenuibus; loculis 320-380 μ latis 260-300 μ alt.; ascis cylindraceutis, breviter pedicellatis, p. sp. 82 \times 10-13, paraphysibus filiformibus praeditis, octosporis; sporidiis monostichis v. distichis, pallide brunneis, 6-7 locularibus, medio constrictis, 22-24 μ long. supra medium 10 μ latis, infra 8-9 μ , utrinque rotundatis.

Hab. in foliis *Compositae* scandentis cujusdam, S. Francisco, Brasilia. — *Socia Lizonia aequalis*.

Sect. 8 Scolecosporae

OPHIODOTHELLA v. Höhn. — Sacc., Syll. XVII p. 859 (ut subgenus). —

Microphiodothis Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 133 (Etym. a *micron* parvum et *Ophiodothis* quia simile). — Stromata parvula unilocularia biophila innata, atra, coriaceo-subcarbonacea; loculi parietibus propriis destituti; ascis octospori; sporae lineares, hyalinae. Est *Puiggarina* scolecospora. — Huc pertinet *Ophiodothis paraguayensis* Speg. et tunc *Microph. paraguayensis* Speg. vocanda — Cnfr. etiam Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 612.

1. **Ophiodothella Ingae** (P. Henu.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5377
p. 614, *Phyllachora?* *Ingae* P. Henn., Hedw. vol. 48 (1908) p. 8. — Maculis sparsis vel effusis, brunneo-fuscis; stromatibus amphigenis, sparsis vel aggregatis, atris, angulato-purvinatis, planis, 1-2 mm. diam.; peritheciis immersis, globulosis, obtuso-ostiolatis; ascis cylindraceuto-clavatis, obtusis, paraphysatis, ... immaturis.

Hab. in foliis *Ingae* sp. (Leguminosae), Iponema, S. Paulo, Brasilia.

2. **Ophiodothella Fici** Ern. A. Bessey, Mycologia 11., 1919, p. 55, tab. 5378
5. — *Ophiodothis Fici* Earle in Herb. — Stromatibus foliicolis 1-10 mm. diam., sparsis v. quandoque concentricè aggregatis, infra nigrescentibus supra epidermide lacerata albicante diu tectis, folium incrassatum (650-860 μ) efficientibus in maculis flavescentibus margine ferrugineis insidentibus, peritheciis 400-450 μ altis 300-500 μ latis, ostioli minute papiliatis praeditis; ascis elongato-fusoi-

deis 105-175 \times 12-16, infra sensim angustatis, octosporis quandoque paraphysibus filiformibus septatis (?) ascos longitudine aequantibus obvallatis; sporis filiformibus continuis 77-87 \times 4,7-6,2, dilute brunneis granuloso-faretis, medio vacuolo (?) 5 μ diam. praeditis; pycnidii consociatis immersis, 180-300 μ diam. 75-100 μ altis; unilocularibus primum astomis; conidiis elongatis, clavulatis, curvulis, hyalinis v. dilute brunneolis continuis, 19 \times 1.

Hab. in foliis *Fici aureae* (Moraceae), prope Larkins Dade Co. Miami Little River Florida, nec non in Cuba, Amer. bor. — Species haec quia paraphysata potius ad gen. sequentem pertinere videtur.

SCOLECODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 412. —

Est *Catacauma* paraphysata, sporidiis filiformibus continuis donata. Typ. gen.:

1. **Scolecodothis Castaneae** Racib. in Theiss. et Sydow, Ann. Myc. 13., 5379 1915, p. 13. — Maculis epiphyllis atro-brunneis, 5-20 mm. lat., flavo-rubro-marginatis; stromatibus epiphyllis nervisequis, linearibus v. moniliformibus, rectis, 5 mm. longis, atro-nitidis; loculis globoso-depressis v. ovoideis, discretis, seriatis, 400 \times 100, albis, ostioli circularibus, 18 μ diam. (inclusa zona circumneunte); ascis filiformi-paraphysatis, 50-58 \times 12, octosporis; sporidiis hyalinis, levibus, fusoides, inaequilateris, 40-44 \times 2,5-3, in asci lumine superne fasciculatis.

Hab. in foliis *Castaneae argenteae* (Fagaceae), Salak, Gedeh et Megamendong in ins. Java, valde frequens (RACIBORSKI).

2. **Scolecodothis circularis** (Bres.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5380 p. 413, *Oxydothis circularis* Bresad., Ann. Mycol. 1906, p. 311 (nom. nud.). Syn. *Cocconia sphaerica* Rick, Fungi austro-amer. 72. — Stromatibus in maculis brunneis insidentibus, hypophyllis, irregulariter rotundatis, usque 4 mm. diam., nigris, nitidis, solitariis v. aggregatis; loculis confertis, rotundato-cuboideis, 360-450 μ latis 300-320 μ altis; ascis octosporis, utrinque angustatis breviter pedicellatis, 105 \times 18-22; sporidiis parallele tetrastichis, rectis v. curvatis, hyalinis, continuis 56-66 \times 4-5.

Hab. in foliis *Myrsines* sp. (Myrsinaceae), « Uva vermelha » dicta, Rio Grande do Sul, Brasilia.

3. **Scolecodothis hypophylla** (Theiss.) Th. et Syd., l. c., *Oxydothis hypophylla* Theiss., Broteria v. XII, 1914, fasc. 1., p. 28. — Stromata hypophylla, phyllachoroideæ, primum simplicia orbicularia 3-6 mm.

diam., pulvinato-plana, atro nitentia, colliculosa, ostiolis crebris papillatis minimis punctato asperula; stroma primum deinde anulo secundario stromatum cingitur diam. 1-1,5 cm. v. etiam tertio folii lamina fusciscente; maculis epiphyllis nullis; asci elongati, cylindraceo-clavati v. medio ventricosuli et utrinque attenuati, octospori, 110-120 \times 15-20, sporidia lanceolato-filiformia, hyalina, continua, guttulis repletis, utrinque acuta, recta, 80-90 \times 6-7.

Hab. in foliis *Myrtaceae*, São Leopoldo, Brasilia.

Subfam. 3. **Montagnelleae**

Sect. 1. **Hyalosporae**

HAPLOTHECIUM Theiss. et Syd., *Ann. Mycol.* 13., 1915, p. 614. — Loculi immersi perithecioidei stromate distincto destituti apice tantum plerumque connexi. Asci octospori paraphysati. Sporidia unilocularia hyalina. — Typ. gen.:

1. **Haplothecium amenti** (Rostr.) Th. et Syd., l. c., *Phyllachora amenti* 5382 Rostr., Syll. XI p. 372.

MONTAGNELLINA v. Höhn., *Fragm. z. Mykol.* XIV n. 769 (1912). — Theiss. et Syd., *Ann. Mycol.* 13., 1915, p. 615. — Loculi subepidermici perithecioidei vix prominuli maturitate apice aperti, a stromate in mesophyllo laxo connexi, clypeum non efformante. Asci paraphysati, octospori. Sporidia unilocularia hyalina. — Typ. gen.:

1. **Montagnellina Pithecolobii** (Racib.) v. Höhn., l. c., *Euryachora Pithecolobii* Racib., Syll. XVI p. 624. 5383
2. **Montagnellina stellaris** (Pers.) Th. et Syd., l. c., cum icon., *Euryachora stellaris* (Pers.) Fuck., Syll. II p. 625. 5384

Sect. 2. **Hyalodidymae**

PSEUDOSPHAERELLA v. Höhn., *Fragm. z. Mykol.* XIII n. 692 (1911). — Theiss. et Syd., *Ann. Mycol.* 13., 1915, p. 618. — Est *Haplothecium* ascis paraphysatis, sporidiis hyalodidymis. Typ. gen.:

1. **Pseudosphaerella Baccharidis** (Rehm) v. Höhn., l. c., *Lizonia Baccharidis* Rehm, Syll. XVI p. 486. 5385
2. **Pseudosphaerella Cupaniae** (Rehm) v. Höhn., l. c., *Lizoniella Cupaniae* Rehm, Syll. XXII p. 165. 5386
3. **Pseudosphaerella Haplopappi** (Rehm) Th. et Syd., *Dothidella Haplopappi* Rehm, Syll. XIV p. 677. 5387

DIPLOCHORELLA Syd., Ann. Mycol. 11., 1913, p. 408. — Theiss. et Syd., l. c. 13., 1915, p. 620. — Syn. *Diplochora* Syd., l. c. p. 60 nec v. Höhnelt. — Stromata totam folii crassitudinem occupantia, in utraque folii pagina discoideæ erumpentia, planiuscula, parte loculigera in superficie matricis sita vel vix tantum immersa, loculis multis prædita. Asci clavati, aparaphysati. Sporidia oblonga, medio 1-septata, hyalina. — Gen. *Euryachoræ* proximum a quo differt stromatis caracteribus.

1. **Diplochorella fertilissima** H. et P. Sydow, l. c. p. 60, fig. 2. — Stromatibus immersis, totam folii crassitudinem occupantibus et in utraque foliorum pagina discoideæ erumpentibus, sparsis v. plus minus aggregatis, rotundatis, planiusculis, $\frac{1}{4}$ - $\frac{3}{4}$ mm. diam., opacis, atris, contextu in parte peritheciigera ex cellulis polyedricis minutis 5-7 μ diam. composito; loculis numerosissimis (20-60) in quoque stromate, conico-globulosis 35-50 μ diam. prominulis; ascis fasciculatis, cylindraceis v. cylindraceo-clavatis, brevissime stipitatis v. sessilibus, apice rotundatis, 80-125 \times 12-16, octosporis, aparaphysatis; sporidiis distichis, oblongo-fusiformibus, utrinque rotundatis, medio 1-septatis, non constrictis, hyalinis, 17-20 \times 5,5-6, loculo superiore subinde parum latiore. 5388

Hab. in foliis vivis *Xylopiæ aethiopicae* (Anonaceae), Amani, Africa or. (A. ZIMMERMANN).

2. **Diplochorella indica** (Sacc.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 662, *Dothidella indica* Sacc., Ann. Mycol. XII, 1914, p. 302. — Follicola et petiolicola; stromatibus mox superficialibus, imprimis hypophyllis, disciformibus, planis, orbicularibus, rarius obtuse angulosis, v. confluentibus, 2-4 mm. diam., 80-100 μ cr., opace nigris, superficie obsolete reticulata et minutis ostioli punctulata, tenuiter coriaceis, loculis numerosis, crebris, subrotundis, minimis, 60-80 μ diam., nigricantibus; ascis clavatis, apice rotundatis, breviter sensim pedicellatis, 45-55 \times 12-14 plerumque contortis, parce filiformi-paraphysatis, octosporis; sporidiis distichis, tereti-clavulatis, utrinque rotundatis, medio 1-septatis, non constrictis, faretis, simulque minute 2-guttulatis, hyalinis, 18-20 \times 6-7,5. 5389

Hab. in foliis petiolisque omnino vivis *Meliaceae* cujusdam, an *Turraeae*?, pr. Bombay, Ind. orient. (Prof. SAXTON).

3. **Diplochorella Burchelliae** Sydow, Ann. Mycol. 18., 1920, p. 158. — Stromata amphigena, plerumque autem hypophylla, in epiphyllis maculas brunneolas saepe leniter depressulas efformantia, quoad magnitudinem et formam valde ludentia, sive minuta singularia 5390

0,5-1 mm. diam., sive pluria aggregata saepe elongata striiformia vel imperfecte circularia 1-3 mm. longa, atra; loculi peritheciiformes subepidermales, densissime dispositi et inter se stromatice connexi 100-130 μ alti, 70-90 μ lati, ostiolo typico carentes; asci apophysati, subsessiles vel brevissime stipitati, cylindraceo-clavati, ad apicem rotundati, octospori, 65-80 \times 10-11; sporae distichae, oblongo-ellipsoideae, medio 1-septatae, non constrictae, utrinque rotundatae, hyalinae, 15-17 \times 3,5-4,5.

Hab. in foliis *Burchelliae bubalinae* (Rubiaceae), verisimiliter in Africa austr. lecta.

CYCLODOTHIS Syd. in Leaflets of Philipp Bot. VI (1913) p. 1929; Sydow in Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 626.—(Etym. *cyclos*, circulus et *dothis* pro Dothidea).—Stromata per epidermidem erumpentia, exacte annuliformia, loculos peritheciiformes continentia, loculis minutis pariete distincto minute celluloso praeditis. Asci clavati, indistincte paraphysati, octospori. Sporidia elongata, oblongo cylindracea, medio 1-septata, hyalina. — A *Diplochorella* differt dispositione loculorum.

1. **Cyclodothis Pachysandrae** Hemmi, Bot. Magaz. Tokyo v. XXIX, 5391 1915, p. 414, cum icon. — Stromatibus hypophyllis, in epiphyllomaculas distinctas rotundas canas efficientibus, sparsis, per epidermidem erumpentibus, plus minus exacte annuliformibus, annulum 1-4 mm. diam., longum formantibus, contextu minutissime celluloso atro-brunneo; loculis numerosissimis, fere peritheciiformibus, densissime dispositis, globoso-conicis, 48-98 μ diam., pariete indistincto v. distincto minute celluloso atro-brunneo, ostiolis leviter prominulis; ascis clavatis v. cylindraceis, apice obtusis, subsessilibus, 44-56 \times 8-12, octosporis, indistincte paraphysatis; sporidiis oblique monostichis usque distichis, fusoides, rectis v. curvulis, utrinque attenuatis, medio 1-septatis, non constrictis, pluriguttulatis, hyalinis, 14-20 \times 3-4,8.

Hab. in foliis vivis *Pachysandrae terminalis* (Buxaceae), in urbe Maruyama prov. Ishikari Hokkaido, Japonia.

2. **Cyclodothis pulchella** Syd., loc. cit. — Stromatibus hypophyllis, in 5392 epiphyllomaculas plus minus distinctas decoloratas efficientibus, per epidermidem erumpentibus, exacte annuliformibus, annulum 2-4 mm. diam. formantibus, atro-brunneis, contextu minutissime celluloso, ob ostiola prominula minutissime asperatis; loculis numerosissimis, peritheciiformibus, densissime stipatis, globoso-conicis, 65-90 μ

diam., pariete distincto minute celluloso obscure brunneo, nucleo albo, ostiolis leniter prominulis; ascis clavatis subsessilibus, 55-70 \approx 14-18, octosporis, indistincte paraphysatis; sporidiis 3-4-stichis, oblongo-cylindræis, rectis vel leniter inaequilateris, utrinque obtusis, medio 1-septatis, non constrictis, hyalinis, 25-35 \approx 4-5.

Hab. in foliis *Piperis corylistachyi* (Piperaceæ), Todaya, Mt. Apo, Mindanao, ins. Philipp.

SCIRRHIACHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 626. —

Est *Diplochorella* loculis lineariter dispositis. — Typ. gen.:

1. *Scirrhiachora groveana* (Sacc.) Th. et Syd., l. c., *Scirrhiia groveana* 5393
Sacc., Syll. IX p. 1040.
2. *Scirrhiachora comedens* (Schw.) Th. et Syd., l. c., *Apiospora come-* 5394
dens (Sch.) Sacc., Syll I p. 541.

ROSENSCHELDIELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 645. —

Loculi superficiales perithecioides, in stromate basali cuticula immerso discoideo insidentes, ostiolo genuino destituti. Asci fasciculati basilares, octospori, paraphysati. Sporidia hyalodidyma. — Typ. gen.:

1. *Rosenscheldiella Styracis* (P. Henn.) Theiss. et Syd., l. c., *Naema-* 5395
cyclus Styracis P. Henn., Hedw. vol. 48, (1908) p. 8. — Stromatibus hypophyllis, sparsis vel gregariis, pulvinato-superficialibus, atris, verrucoso-rugulosis, 1-2 mm. diam.; loculis immersis, verrucoso-ostiolatis, rotundatis, ca. 180 μ diam.; ascis clavatis, apice obtuse rotundatis, paraphysatis, octosporis, 70-90 \approx 15-20; sporidiis subtristichis, oblongo-fusoideis vel clavatis, obtusis, hyalinis, 1-septatis, 22-27 \approx 5-6.

Hab. in foliis *Styracis*, Morro Pellado, S. Paulo, Brasilia. —
A *Dothidella pulverulenta* (B. et Br.) distincta.

MONOPUS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 647. — Loculi

perithecioides superficiales, pede brevi centrali in matrice radicati, ostiolo genuino destituti. Asci paraphysati. Sporidia hyalodidyma. — Typ. gen.:

1. *Monopus pulverulentus* (B. et C.) Th. et Syd., l. c., *Dothidella pul-* 5396
verulenta (B. et C.) Sacc., Syll. II p. 631.

HAPLOTHECIELLA v. Höhnelt, Ber. deutsch. bot. Ges. XXXV, 1917, p. 251 (descriptio nulla); XXXVI, 1918, p. 314. — Stroma hyphen-

chymaticum. Perithecia intraepidermica et cuticula connexa. Asci paraphysati octospori. Sporidia hyalina aequaliter bilocularia. — Typ. gen. :

1. **Haplotheeciella Hellebori** (Chaill.) v. Höhn., l. c. — Fructificatio al- 5397
tera *Dothiophacopsis Hellebori* v. Höhn.

Sect. 3. Phaeodidymae

PYRENOBOTRYS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 182; 13., 1915, p. 627. — Fructificatio perithecioides subepidermica maculiformis, ostiolo genuino destituta. Stroma nullum vel vix ex hyphis laxis efformatum. Asci octospori; paraphyses filiformes. Sporidia phaeodidyma. — Typ. gen. :

1. **Pyrenobotrys conferta** (Fr.) Th. et Syd., l. c., *Stigmatea conferta* 5398
(Fr.) Sacc., Syll. I p. 544. — Syn. *Dothidella Vaccinii* Rostr., Syll. IX p. 1038.
2. **Pyrenobotrys Heliconiae** (P. Henn.) Th. et Syd., l. c., *Dothidella He-* 5399
liconiae P. Henn., Syll. XVII p. 850.

CROTONE Theiss. et Syd., Ann. Mycol. 13., 1915, p. 629. — Stroma intramaticale montagnellaceum. Loculi subepidermici apice prominuli ostiolo genuino destituti. Asci paraphysati octospori, infra caespitosi. Sporidia phaeodidyma. — Typ. gen. :

1. **Crotone Drimydis** (Lév.) Theiss. et Syd., l. c., *Bagnisiella Drimydis* 5400
(Lév.) Sacc., Syll. II p. 590. — Syn. *Montagnella Drimydis* P. Henn., Syll. p. 629.
2. **Crotone Emmoti** (P. Henn.) Th. et Syd., l. c., *Dothidea Emmoti* P. 5401
Henn., Syll. XIV p. 681.

TERATOSPHAERIA Sydow, Ann. Mycol. 10., 1912, p. 39. — Theiss. et Syd., l. c., 13., 1915, p. 631. — Loculi subepidermici, perithecioides, ramoso-radiantes, ostiolo genuino destituti, contextu stromatico laxo hyphenchymatico. Asci caespitosi basilares, paraphysati, octospori. Sporidia phaeodidyma.

1. **Teratosphaeria fibrillosa** Syd., l. c., cum icon. — Peritheciis amphi- 5402
genis, plerumque dense in fibrillas eximie formatas ramosas quasi stellatim dispositas usque 1 cm. longas seriatim aggregatis, in contextu matricis profunde immersis, globosis v. depresso-globosis, 150-220 μ diam., coriaceo-carbonaceis, atris, mutua pressione subinde angulosis, circa verticem matricis nigrificata cinctis, ostiolo

atro tantum erumpente; ascis fasciculatis, sessilibus v. subsessilibus, clavatis v. saccatis, saepe curvatis, apice rotundatis v. etiam attenuatis, mucro involutis, apice crassius tunicatis, 70-110 \times 20-36 μ aparaphysatis; sporidiis octonis, distichis v. tristicis, cylindratis, medio 1-septatis, mox non, mox leniter constrictis, subinde curvulis, utrinque rotundatis, primo intus minute guttulis, tandem eguttulatis et non v. vix constrictis, ex hyalino flavo-fusculis v. potius olivaceo-fusculis, 35-46 \times 9-12.

Hab. in foliis *Protea grandiflorae*, Bains Kloof Wellington C. C., Africae austr. (E. M. DODGE).

STALAGMITES Theiss. et Syd., Ann. Mycol. 12., 1914, p. 189; 13.; 1915, p. 650. — Stroma erumpens cylindraticum, supra digitiformi divisum, loculi singuli apicem digitationum occupantes, parietibus propriis et ostiis genuinis destituti. Asci octospori aparaphysati. Sporidia phaeodidyma. — Typus gen. :

1. *Stalagmites tumefaciens* (Syd.) Th. et Syd., l. c., tab. IV, fig. 15, 5403
Dothidea tumefaciens Syd., Syll. XXII p. 435.

DOTHIDOTTHIA v. Höhn., Ber. deutsch. bot. Ges. XXXVI, 1918, p. 5404 312. — Perithecia prominentia; hypostromate hyphis perpendiculariter dispositis insidentia. Paraphyses filiformes. Asci octospori. Sporidia phaeodidyma. — Typus generis *Doth. Symphoricarpi* (Rehm ut *Pseudotthia*) v. Höhn.

Sect. 4. Hyalophragmiae

MONTAGNELLA Speg. — Syll. II p. 646, IX p. 1045, XI p. 377, XIV p. 682, XVI p. 629, XXII p. 439. — Syn., sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 634, *Gillotia* Sacc. et Trott., Syll. XXII p. 253.

1. *Montagnella Alyxiae* Pat. et Har., Bull. Soc. Mycol. Fr. 1912, p. 5405 284. — Stroma atro vel atro-brunneo, coriaceo, non carbonaceo; peritheciis globosis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., concoloribus, laevibus, poro pertusis, aliquando collabentibus, carnosocoriaceis; ascis octosporis, pluriseriatis; ascosporis hyalinis dein vix brunneolis, elongatis, utraque fine obtusis vel leniter attenuatis, triseptatis, ad septa constrictis, 23-30 \times 8-10.

Hab. in tumoribus ad ramos vivos praecipue in axillis *Alyxiae* sp. (Apocynaceae), Tahiti (PAUCHER).

SYNCARPELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 631.— Est

Montagnella ascis paraphysatis donata. — Typ. gen.:

1. **Syncarpella tumefaciens** (Ell. et Harkn.) Th. et Syd., l. c., *Monta-* 5406
gnella tumefaciens (Ell. et H.) Berl. et Vogl., Syll. IX p. 1046. —
Syn. *Mont. Brothariana* P. Henn., Syll. XVI p. 629.
2. **Syncarpella tuberculiformis** (Ell.) Th. et Syd., l. c., *Plowrightia tu-* 5407
berculiformis Sacc., Syll. II p. 638.

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Sect. 5. Hyalodictyae

HYALOCURREYA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 640.— Lo-

culi subepidermici stromate connexi et stromate basilari adnati, apice subliberi ostiolo genuino destituti. Asci basilares fasciculati, paraphysati. Sporidia hyalodictya. — Typ. gen.:

1. **Hyalocurreya sandicensis** (E. et E.) Th. et Syd., l. c., *Curreya sandi-* 5408
censis Ell. et Ev., Syll. XIV p. 684.
2. **Hyalocurreya palmincola** (Rehm) Th. et Syd., l. c., *Curreyella palmin-* 5409
cola (Rehm) Sacc. et Tr., Syll. XXII p. 441.

Sect. 6. Phaeodictyae

CURREYA Sacc. — Syll. II p. 651, IX p. 1051, XI p. 378, XIV p. 684,
XVI p. 632, XVII p. 585.

1. **Curreya peckiana** Sacc., Ann. Mycol. XIII, n. 2 (1915) p. 117. — 5410
Stromatibus laxè gregariis, plano pulvinatis, prominentibus super-
ficie leviter areolato-rimosis, epidermide cinctis, nigris, $\frac{1}{2}$ - $\frac{3}{4}$ mm.
diam.; loculis atris saepe stratosi 90 μ diam.; ascis tereti-clavatis,
deorsum sensim breviter tennatis, 60-70 \times 10-12, octosporis; para-
physibus copiosis filiformibus, sursum lenissime incrassatis; spo-
ridiis distichis v. oblique monostichis, elliptico-oblongis, utrinque
obtusulis, v. basi acutulis, subinaequilateris, 5-7-septato-murifor-
mibus, ad septum medium leviter constrictis, fulvo-fuligineis.

Hab. in ramulis corticatis emortuis *Nemopanthi mucro-*
natae, Tupper Lake N. Y., Arg. (HOUSE). — *Pulchella*, distincta
species.

EPIBOTRYS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 644.— Stroma
montagnellaeus, intramaticale, erumpens. Loculi liberi perithe-
cioidei stromate insidentes ostiolo genuino destituti. Asci apara-
physati, octospori. Sporidia phaeodictya. — Typ. gen.:

1. *Epibotrys bambusicola* (Speg.) Th. et Syd., l. c., *Curreya ? bambu-* 5411
sicola Speg., Syll. IX p. 1051.

Sect. 7. *Scolecosporæ*

OPHIOCARPELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 644. —
Est *Montagnella* paraphysibus destituta, sporidiis hyalinis filifor-
mibus septatis donata — Typ. gen.:

1. *Ophiocarpella tarda* (Harkn.) Th. et Syd., l. c., *Ophiodothis tarda* 5412
Harkn., Syll. IX p. 1051.

ROSENSCHELDIA Speg. — Syll. IX p. 1036, XVII p. 852.

1. *Rosenscheldia breckleana* (Rehm) Theiss. et Syd., Ann. Myc. 13., 5413
1915, p. 649, *Bertiella breckleana* Rehm, Ann. Mycol. IX, 1911,
p. 364. — Perithecia in soros secundum caulem longitudinales, 1-2
cm. long., 1-2 mm. lat. nigrescentes utrinque acutatos, caulis vix
decorticati hypertrofici insidentes arctissime congregata, non con-
nata neque mycelio perspicuo conjuncta, globulosa, glabra, nigra,
pore perspicuo pertusa, excipulo parenchymatico, crasso fusco, 0,15
mm. diam.; asci cylindræce-clavati, apice rotundati, octospori, ca.
100 \times 12-14 J ope —; sporæ cylindræceæ, utrinque subacutatae,
rectæ v. subcurvatae, 3-septatae, ad septa vix constrictæ, quaque
cellula 2-guttulata, hyalinae, 30-36 \times 5-6, distichæ; paraphyses
hyalinae.

Hab. ad caulem *Solidaginis*, Kulm N. Dak., U.S. America,
North Dakota Fungi n. 373 a (BRECKLE) — Sec. Theiss. et Syd.
l. c. eodem est ac *Rosensch. Heliopsidis* (Schw.) Th. et Syd., Syll. II
p. 646 (ut *Montagnella*).

DISCOCHORA v. Höhn., Ber. deutsch. bot. Ges. XXXVI, 1918, p. 315. — 5414
Habitus *Phyllachoræ* sed ostiolo circinnato. — Typ. gen. *Disc. Ilicis*
(Schl.) v. Höhn., fructificatio altera *Physalosporæ Ilicis* (Schl.) Sacc.

SEPTOCHORA v. Höhn., Ber. deutsch. bot. Ges. XXXV, 1917, p. 254. — 5415
Descriptio nulla. — Typ. gen.: *Septochora samaricola* (Died.) v. Höhn.
loc. cit.

GENERA INCERTAE SEDIS V. E DOTHIDEACEIS REMOVENDA

MICRODOTHELLA Syd., Philipp. Journ. of Sc. O. Bot. v. IX, 1914 n. 2
p. 169. — Stromata subcuticularia, radiato-contexta, crustaceo-con-

vexa, hypothecio epidermali stromatico, 1-2 locularia. Asci typice octospori, paraphysibus atypicis. Sporidia hyalina unilocularia.— Typ. gen.; *Micr. ramularis* (Ell. in Asterina) Th. et Syd. = *Myiocopron ramulare* (Ell.) Speg.

1. *Microdothella culmicola* Syd., l. c., fig. 1, Theiss. et Syd., Ann. Myc. 5416 13., 1915, p. 259. — Stromatibus sparsis vel hinc inde aggregatis, subinde binis confluentibus, minutis 200-450 μ diam., rotundatis, leniter convexis, atris, cum basi in epidermide sitis in hypodermidem hyphas paucas solitarias fuscas tantum emittentibus, centro opacis, ad marginem dilute fuscis, ex hyphis radiantibus 2-3 μ latis remote septatis (articulis 10-18 μ longis) maeandrice curvatis contextis; loculis 1-2 in quoque stromate, poro rotundo 15-20 μ lato tandem apertis; ascis primitus globulosis, mox ovatis vel oblongis, apice rotundatis, sessilibus, octosporis, rarius 4-sporis, 35-55 \times 18-22, paraphysatis; sporidiis plerumque distichis, ellipsoideis vel oblongo-ellipsoideis, continuis, hyalinis, 17-20 \times 8-9.

Hab. ad culmos emortuos *Ischaemi* (Graminaceae), Lake Mangao et *Chloridis incompletae* (Graminaceae), Silonga, Palawan, Ins. Philipp. (MERRILL).

GRIGGSIA F. L. Stevens et N. Dalby, Bot. Gazette, 68., 1919, p. 224 (Etym. a Cl. ROB. F. GRIGGS). — Perithecia solitaria dimidiata, astoma, demum apice irregulariter aperta e stromate superficiali epidermico orta; mycelio vegetativo interno; parietibus peritheciolorum crassis parenchymaticis. Asci basillares octospori. Sporidia ovoidea, hyalina 1-locularia. Paraphyses hyalinae elongatae filiformes. Conidia in pycnidiis dimidiatis efformata. — Gen. *Rhipidocarpum* Th. et Syd. in Dothideales affinis, sed ostiolo carenti ad *Perisporiaceas* vergens.

1. *Griggsia cyathea* F. L. Stevens et N. Dalby, l. c. tab. XV-XVI. — 5417 Peritheciis subhemisphaericis 200-300 μ diam. 180-160 μ altis, parietibus basi et apice 24 μ circ. cr.; ascis ovoideis 51 \times 17-24; sporidiis 17 \times 10, ovoideis hyalinis, continuis. Statu conidico leptostromaceo, pycnidiis dimidiatis amphigenis v. plerumque epiphyllis, praedito; pycnidiis ambitu circularibus 200-315 μ diam. 10-30 μ altis, nigris, dense reticulatis, rectis 7 μ circ. latis; maculis irregularibus 1-3 mm. diam., numerosis; sporulis unilocularibus, ovoideis v. piriformibus, obscuris, obtusis, 28-34 \times 14.

Hab. in frondibus *Cyathea arborea* (Filices), Maricao et El Alto de la Bandera, Porto Rico.

Fam. 4. Hypocreaceae DE NOT. *)

Sect. 1. Allantosporae

ALLANTONECTRIA Earle — Syll. XVI p. 1140, XVII p. 778.

1. *Allantonectria Yuccae* Earle — Syll. XVII p. 728. — Sacc., Notae 5418 mycol. XXII p. 167 (1917).

Hab. in foliis *Yuccae glaucae* (Liliaceae), parasitica in pyrenidiis *Kellermanniae*, Mandan (Leg. O. A. STEVENS, comm. BRECKLE). — Perithecia 130-150 μ diam.; asci 22-28 \times 3,3-3,5, octospori; paraphyses guttulae, deliquescentes; sporidia botuliformia (ut in *Valsis*) 4,7-5 \times 1,8, hyalina; ostiolum, 10-11 μ diam., rubello periphysatum; contextus tenuiter cellulosus, rubescens.

PSEUDONECTRIA Seaver 1909 (= *Nectriella* Sacc. 1877 non Nitzschke 1869; *Byssonectria* Karst. 1879).

1. *Pseudonectria bambusina* Syd., Ann. Mycol. 15., 1917, p. 214. — Perithecia plus minus dense aggregata, sed semper discreta, stromate nullo, superficialia, basi hyphulis paucis tenuibus pallidis cineta, conoideo-globosa, sed obtusa, glabra, levia, obscure brunnea, sub micr. flavo-brunnea vel rufo-brunnea, 75-100 μ diam., ostiolo parum perspicuo dilutiore, contextu irregulariter minuteque parenchymatico, circa ostiolum e fibris radiantibus composito; asci tenerimi, fusoido-clavati, 22-28 \times 6-9, apophysati, octospori; sporae oblique monostichae vel distichae, oblongae vel anguste ellipsoideae, utrinque obtusae, continuae, saepe minute guttulae, hyalinae, 9-10 \times 2,5-3,5.

Hab. in culmis emortuis *Bambusae* (Graminaceae) in consortio *Hyphomycetis* (Fungi) cujusdam, Rizal, Ins. Philipp. (H. S. YATES). — *Nectriellae Bambusae* proxima nisi identica.

2. *Pseudonectria pipericola* F. L. Stevens, Botan. Gazette, 65., 1918, p. 230. — Peritheciis numerosis, minutis, 100-125 μ diam., rubridis, setulis paucis ostiolum circumdantibus praeditis; setulis brevibus 20-30 μ , obtusis, continuis; ascis cylindraceutis octosporis, 50 \times 5-7, apophysatis; sporidiis monostichis ellipsoideis v. oblongis, obtusis continuis hyalinis, 9-10 \times 3-4. — Mycelio in *Meliola* arcte adpresso.

*) Cnfr. MAIRE, Ann. Mycol. IX, 1911 p. 316, v. HÖHNEL et WEESE, ibid. d. 422, et XII, 1914, p. 128.

Hab. parasitica in *Meliola tortuosa* (Fungi), in foliis *Piperis umbellati* et *marginati* (Piperaceae), in Porto Rico. — Affinis *Nectriae mycelophilae* Peck.

3. *Pseudonectria Metzgeriae* Ade et v. Höhnelt, Ann. Mycol. 17., 1919, 5421 p. 117. — Peritheciis rubro-ocraceoflavis, superficialibus plerumque solitariis, globosis, supra discoideis, usque 270 μ altis 240 μ latis, disco 110 μ lato, pilis plus minus numerosis hyalinis simplicibus obtusis, 20-26 \times 3-3,5, praedito; parietibus peritheci 12 μ cr., ostiolo periphysibus circumdato; paraphysibus nullis; ascis octosporis cylindraceis v. cylindraceo-clavatis, tenuiter tunicatis, 40-70 \times 3-4, infra breviter v. longe pedicellatis; sporis monostichis v. distichis, rectis utrimque fusoides-tenatis, unilocularibus, 5 \times 1,3-1,5; in medio sporarum corpusculis 2 raro 3 fusoides 1,5 μ long. J. ope cyanescentibus sistunt.

Hab. in parte superiore thalli *Metzgeriae furcatae* (Hepaticae), inter Brückenau et Mitgenfeld, Rhön, Germania (A. ADE).

Sect. 2. Hyalosporae

NECTRIELLA Sacc. — Syll. II p. 448, IX p. 941, XI p. 354, XIV p. 621, XVI p. 559, XVII p. 778, XXII p. 445.

1. *Nectriella Cucumeris* J. Hanzawa, Zeitschr. Pflzkr. XXIII (1913) 5422 p. 71, c. ic. — Conidiis haud stratosi, forma ludibundis, globosis, fusoides, leniter clavatis vel cylindricis, rectis vel curvulis, utrinque rotundatis, 1-2-septatis, 14-23 \times 6-8, hyalinis; conidiophoris simplicibus vel ramosis; chlamydosporis terminalibus vel intercalariis, nunc unicellularibus, globosis, nunc bicellularibus, piriformibus, ad septum constrictis, 10-12 μ circ. longis, levibus, interdum seriatis; peritheciis superficialibus, stromate indistincto insidentibus, sparsis vel coacervatis, ovoideis vel globosis, verrucosis, 640-960 \times 560-720, collo indistincto, ostiolo irregulari; ascis octosporis, cylindraceis vel clavatis, 230-250 \times 25-34, operculo apicali dehiscen-
tibus; sporidiis irregulariter dispositis, ovoideis vel ellipsoideis, hyalinis, 18-22 \times 12-17; paraphysibus filiformibus 4-8 μ , crassis.

Hab. parasitica in radicibus caulibusque *Cucumeris* (Cucurbitaceae) in calidariis cultis, Hannover, Germania.

2. *Nectriella Casaresi* Gonz. Frago, Mem. R. Soc. Españ. Hist. Nat., 5423 t. 11., 1919, 3., p. 109. — Peritheciis globosis, usque 300 μ diam., sparsis vel paucis gregariis, contextu subceraceo-membranaceo, indistincte pseudoparenchymatico, rubro-aurantiaceo, ostiolo regulariter

pertuso, stromate nullo, ad basim hyphis hyalinis, filiformibus, ramosis, circumdatis; ascis numerosis, fasciculatis, cylindraceis, apicem rotundatis, brevi crassiuscule stipitatis, usque 50 μ long. 5-6 μ diam., paraphysatis, octosporis; sporidiis pallide aurantiaceis, hyalinulis in ascis mucro evolutis, ellipsoideis, usque 6 \times 1,7, utrinque rotundato-incrassatis, 2-guttulatis, guttulis primam subhyalinis, dein facile colorantibus (Bleu C⁴ B).

Hab. in foliis vivis *Frullaniae dilatatae* (L.) Dum. (Hepaticae), prope Villagarcia de Arosa, Pontevedra, Hispania (D. A. CASABES).

3. *Nectriella maquilungica* Sacc., Notae Myc. XXIII p. 69 (Accad. Veneto-trent. 1917). — Peritheciis hinc inde sparsis v. in caespitulos approximatis, minutis, non collabentibus, dilute roseis, vix pruinulosis, 175-200 μ diam.; contextu tenui, celluloso, pallide roseo; ostiolo papillato; ascis tereti-clavatis, 60-65 \times 7-9, apice obtuse tenuatis, lumine bifoveolatis, deorsum sensim tenuatis 4-sporis; paraphysibus crassis (spuriis?); sporidiis distichis v. oblique monostichis oblongo-fusoideis, utrinque obtusiuscule tenuatis, 11-12 \times 3,6, nubilosis, hyalinis, continuis.

Hab. in ramis emortuis *Leucaenae glaucae* (Leguminosae), M. Maquilung, Ins. Philipp.

4. *Nectriella Ptychospermatis* Rehm, Ascomyc. Philipp. VI, Leaflets of Philipp. Bot. VI (1914) p. 2275. — Peritheciis gregariis, innato-erumpentibus, globulosis, flavidis, 120 μ diam., glabris, ostiolo conoideo minimo obscuriore praeditis, tenuiter parenchymatice contextis, mox collabentibus; ascis cylindraceis, 70-80 \times 9-10, paraphysatis, octosporis; sporidiis distichis, clavatis, continuis, hyalinis, 10 \times 5.

Hab. in *Ptychospermate Macarthurii* (Palmae), Los Baños, ins. Philipp. (S. A. REYES).

5. *Nectriella philippina* Rehm, Ascomyc. Philipp. IV, Leaflets of Philipp. Botany VI (1913) p. 1935. — Peritheciis sessilibus, nonnullis arete coacervatis, lenticularibus, sulfureis, minutissime fuscidule papillulatis, 150 μ diam., tenuiter imbricato-membranaceis, flavidule contextis, glabris; ascis ovoideis, sessilibus, crasse tunicatis, apice rotundatis, octosporis, 50 \times 20-24; paraphysibus subramosis 1 μ cr.; sporidiis distichis, ovoideis, utrinque rotundatis, continuis, hyalinis, 15-18 \times 9.

Hab. ad caulem emortuum *Passiflorae quadrangulae* (Passifloraceae), Luzon, Prov. Laguna, Los Baños, ins. Phi-

lipp. (O. F. BAKER).

HYPONECTRIA Sacc., Syll. II p. 455, XI p. 354, XIV p. 621, XVI p. 559, XXII p. 443.

1. **Hyponectria Embeliae** Petch, Ann. R. Bot. Gard. Peradeniya, v. VI, 5427
P. III, 1917, p. 228 — Maculis rubro-aurantiacis, rotundatis, ad 2 cm. diam., ostioli minutis, pellucidis punctatis; peritheciis immersis, sparsis, ovoideis vel subglobosis, supra conicis, 0,4 mm. alt., 0,25-0,3 mm. diam., pariete hyalino, ostiolo epiphylo; ascis cylindraceis, breviter pedicellatis, octosporis, 100-120 \times 10-14; paraphysibus linearibus, numerosis; sporis monostichis saepius oblique, late ovalibus, hyalinis, continuis, episporio crassiusculo, 10-12 \times 7-8.

Hab. in foliis *Embeliae viridiflorae* (Diapensiaceae), Hakgala, Ceylon.

2. **Hyponectria Phaseoli** F. L. Stevens, Bot. Gazette 70., 1920, p. 401. — 5428
Maculis amphigenis circularibus 5-10 mm diam., e paucis numerosis saepe confluentibus, pallide flavidis, translucidis margine indefinitis; peritheciis copiosis, immersis, translucidis, 200-230 μ diam., maturis ostiolo distincto 20 μ diam. prominenti et margine structura clypeata donato praeditis; ascis e linearibus clavatis 75 μ long., octosporis; sporidiis monostichis ad apicem irregulariter confertis, irregulariter e sphaeroideis ovoideis, saepe e mutua pressione angulosis, continuis, hyalinis, 9-10 \times 12; paraphysibus filiformibus ascos subaequantibus.

Hab. in foliis *Phaseoli adenanthi* et *Phaseoli* sp. nec non *Vignae vexillatae* (Leguminosae), in Porto Rico pluribus locis.

3. **Hyponectria Memecyli** Petch, Revis. Ceylon Fungi, Ann. R. Bot. 5429
Gard. Peradeniya, v. VI, P. IV, 1917, p. 328. — *Sphaeria Chionanthi* Berk. et Br., Fungi of Ceylon n. 1114; *Didymella Chionanthi* (Berk. et Br.) Saccardo, Syll. I p. 549; *Sphaerella Ch.* (B. et Br.) Cooke. — Sec. Cl. PETCH in l. c., fungus est vera *Hyponectria*, sed sporis demum uniseptati etiam *Charonectria*, sed matrice errata (non *Chionanthus zeylanicus* vero *Memecylon umbellatum*, Melastomataceae) species *Hyph. Memecyli* vocanda.
4. **Hyponectria sinensis** Sacc., Philipp. Journ. of Sc. Manila, P. I, 1921, 5430
p. 599. — Maculis corticalibus subalutaceis, versiformibus; peritheciis dense gregariis, subcutaneis, globulosis, 0,20-0,25 mm. diam., pallidis, ostiolo subumbilicato albo erumpenti; contextu laxo cel-

luloso, sordide aureo; ascis cylindraceis, breviter stipitatis, 130-150 × 17-19, apice rotundatis, tunica initio incrassata praeditis, paraphysibus diffuentibus, octosporis; sporidiis oblique monostichis oblongo-limoniformibus, apicibus brevissime apiculatis, rectis v. inaequilateris, 28 × 12, hyalinis, faretis.

Hab. in ramis morientibus *Citri* sp. (Rutaceae), Kwang Tung, Paak Shan, Cina (REINKING). — Ad genus *Physalosporinam* nutat.

BYSSONECTRIA Karst. — Syll. II p. 456, IV p. 942, XI p. 354, XIV p. 623, XVI p. 560, XXII p. 446.

1. *Byssonectria aggregata* Bresad., Ann. Mycol. IX, 1911, p. 275. — 5431
Subiculo pallido ex hyphis conidiferis, 1-4 μ cr., efformato; conidiis hyalinis, obovatis, 12-15 × 6-9; peritheciis caespitulose aggregatis, obovatis. tenuiter papillatis, furfuraceis, $\frac{1}{4}$ mm. diam., carneolis, contextu parenchymatico; ascis cylindraceis v. clavatis, 100-120 × 7-15, plus minusve stipitatis; sporidiis monostichis, distichis v. conglobatis, hyalinis, continuis, oblongis, 11-13 × 4-5; paraphysibus nullis.

Hab. ad corticem arborum, Kisantu, Congo (VANDERYST). — In subiculo adsunt quoque hyphae stramineae, septatae, tenuiter tunicae, majores, quarum connexionem cum hyphis conidiferis Auctor eruere non potuit.

UROPOLYSTIGMA A. Maublanc, Bull. Soc. Mycol. de Fr., XXXVI, 1920, p. 36 (Etym. a *oura* cauda et *stigma* punctum). — Stroma subcarnosum, fulvum, depresso-clypeatum, epidermide persistente tectum; perithecia immersa; asci cylindracei, 8 spori, paraphysati; sporidia elliptica, sursum in rostrum attenuata, continua, hyalina. — A *Polystigma* stromate incompleto, sporidiis caudatis diversum; caractere stromatis gen. *Apiosphaeriae* v. Höhn.

- 1 *Uropolystigma atro-testaceum* A. Maublanc, l. c., tab. III fig. 1-4. — 5432
Maculis sparsis v. gregariis, orbicularibus, 3-8 mm. diam., amphigenis, ad epiphyllum planis, fulvis, dein maculis nigris, subnitentibus, angulosis nervulisque limitatis centro ornatis, demum nigris, annulo fulvo cinctis, ad hypophyllum leviter convexis, testaceis v. aurantio-testaceis, margine striatulis, centro ostiolis punctatis, demum tuberculatis. Stromatibus sub epidermidem persistentem nascentibus, depresso-clypeatis, intus pallidis, usque ad 400 μ crassis: contextu subcarnoso, e cellulis seriatis, hyalinis, tenue tunicatis formato. Peritheciis immersis, globoso-lenticularibus, 250-500 μ diam.

tunica tenui, hyalina, stromate adnata praeditis; ostioliis hypophyllis, primum impressis, obscurioribus; ascis cylindraceutis, apice obtusis incrassatisque, deorsum plus minusve longe pedicellatis, 150-210 \times 8-9 (pars. sporif. 120-165 μ), paraphysibus numerosis, filiformibus; sporidiis monostichis (raro medio distichis), oblongis, basi obtusis, sursum (rarius deorsum) in rostrum conoideum, rectum v. incurvatum, acutiusculum desinentibus, hyalinis, continuis, granulosis, 25-31 (cum rostro) \times 5-7. Mycelio hyalino, in parenchymate evoluto.

Hab. in foliis vivis Malpighiaceae cujusdam, Ouro Preto et Caraca, Brasiliae.

LEPTOCREA Syd., Ann. Myc. 14., 1916, p. 87 (Etym. *leptus* tenuis et *creas* caro, ob stroma tenue carnosulum).—Stromata subepidermica, innata, laeticoloria, 1-v. confluyendo 2-loculigera. Asci clavati, paraphysati, 8-spori. Sporidia oblonga, continua, hyalina. Conidia discoidea, continua, colorata.

1. *Leptocrea orbiculata* Syd., l. c. p. 87, fig. 5. — Stromatibus in epiphyllis tantum visibilibus, maculis nullis vel obsoletis pallidis indeterminatis insidentibus, sparsis, subinde duobus juxtapositis et confluentibus, orbicularibus, 175-250 μ latis, usque 100 μ altis, subepidermalibus, flavo-rufis. centro papillato-perforatis, pariete 15-25 μ crasso carnosulo flavido minute celluloso, loculum singulum continentibus. Asci cylindraceutis, breviter stipitatis, 65-80 \times 10-14, octosporis, filiformiter paraphysatis; sporidiis distichis, oblongis, utrinque saepe leniter attenuatis, sed apicibus obtusis, continuis, eguttulatis, hyalinis, 12-15 \times 4-4,5; stromatibus conidiigeris similibus, sed paullo minoribus; conidiis e fronte visis discoideis, 6,5-8 μ diam., e latere visis ellipsoideis vel oblongis, continuis, fuliginis, levibus, guttula 1 centrali oleosa praeditis, tandem protusis et matricem inquinantibus, sporophoris hyalinis suffultis.

Hab. in foliis *Pithecolobii* sp. (Leguminosae), Seringal, Auristella Rio Acre, Peruvia (E. ULE).

PHYSALOSPORINA Woron. — Syll. XXII p. 444.

1. *Physalosporina Tranzschellii* Woron., Ann. Mycol. IX, 1911, p. 224. Rehm, Ascom. Exsicc. fasc. 46 n. 1935. — Stromatibus e cortice caulis erumpentibus, dein valde excrecentibus, 3-4 cm. (usque ad 10-12 cm.) longis, plerumque totum caulem cingentibus, ex cellulis parenchymaticis hospitis mutatis atque hyphis constructis; extus

cinereis (sub lente fuligineis), intus albidis v. pallide roseis (sub lente incoloratis v. umbrinis); peritheciis in superiorem partem stromatis immersis, vix ostiolis eminentibus, globosis v. oblongis atque in superiore parte leviter coarctatis (300)-400-435-(600) \times (275)-300-320(-545), contextu parenchymatico fuligineo; ascis cylindraceis v. cylindraceo-fusoideis, 130-135 \times 10-12 (14), paraphysatis, membrana apice, saepe incrassata et poro pertusa; sporis monostichis, ovoideis, 13-15 \times 7,5-8. — Pycnidiis angulato-globosis, saepe oblongis, 165-220 \times 90-200 (plerumque 160-190 μ), conspicue rostratis, stromati immersis v. subsuperficialibus, saepe inter se coalescentibus, contextu parenchymatico fuligineo; sporulis bacillaribus, 4-5 \times 1.

Hab. in ramis Caraganae fruticis (Leguminosae), Gub. Ufa distr. Belebej prope Durassovo, Russia (STRAJEVSKIJ).

2. *Physalosporina Onobrychidis* (Jaap) Saccardo, *Physalospora Onobrychidis* Jaap, Ann. Mycol. 14., 1916, p. 14. — Peritheciis late sed laxe gregariis, subcutaneis, demum ostiolo per epidermidem tumidulum erumpentibus, globosis, e flavido brunneolis, 150-300 μ lat., contextu stramineo-flavo, circa ostiolum obscuriore; ascis tereti-fusoideis, breviter crasseque stipitatis, apice late rotundatis, 80-100 \times 10-20, octosporis; sporidiis irregulariter monostichis, in medio asco saepe horizontalibus, ellipsoideis, rotundatis, 10-20 \times 7-10, continuis, hyalinis, grosse granulosis, strato mucoso carentibus.

Hab. in foliis vivis et languidis Onobrychidis Capitis-galli (Leguminosae), pr Trau, Dalmatiae.

3. *Physalosporina Ducellieri* Maire, Bull. Soc. H. N. de l'Afr. du Nord, 1917, p. 160 fig. 2. — Stromate e pallido incarnato, demum rufo-brunneo, ex hyphis valde incrassatis, amyloidiferis, intercellularibus, per totum folium expansis contexto; peritheciis epiphyllis sparsis v. gregariis, immersis, rubris, ostiolo demum prominulo, fusciscenti, minuto, subglobosis v. ovoideo-lageniformibus, 200-205 \times 150-200, contextu celluloso, granulis rubro-aurantiis farto; paraphysibus filiformibus, septatis, membrana gelificata mox evanidis; ascis cylindraceis, inoperculatis, membrana gelificata praeditis, 75-85 \times 10-12; sporidiis monostichis, ellipsoideis, levibus, hyalinis continuis, 2-8 guttulatis, 13-15 \times 7-8; pycnidiis epiphyllis, subepidermicis, subglobosis, 70-100 μ diam., subhyalinis; sporulis hyalinis, 4-5 \times 1,5-2,5.

Hab. in foliis Onobrychidis Capitis-galli (Leguminosae), in dunis Maison-Carrée et in Kabylia, Africae bor. — Etsi

diagnoses satis differant, species a præcedente non videtur diversa.

GLAZIELLA Berk. — Syll. II p. 581, IX p. 1004, XVI p. 615.

1. **Glaziella Bakeriana** Sacc., Notae Mycol. XXIII p. 69 (Accad. Ve. 5437 neto-trent. 1917). — Stromatibus alte pulvinatis, 3-4 mm. diam., irregulariter e basi plana hemisphaericis, levibus, vix ostioli minimis punctulatis, rufescentibus, extus demum nigricantibus, contextu celluloso fusco-purpureo; peritheciis globulosis, stromate omnino immersis, plerumque monostichis, $\frac{1}{3}$ mm. diam.; contextu celluloso saturate purpureo; ascis cylindraceis, exiguis, apice obtusulis, subsessilibus, $28-32 \times 4,5-5$, octosporis, aparaphysatis; sporidiis monostichis, rarius medio distichis, ellipsoideis, apice rotundioribus, $7-8 \times 3,5$, hyalinis, obsolete guttulatis.

Hab. in culmis emortuis *Bambusae vulgaris* (Graminaceae), Los Baños, Ins. Philipp. — Eximius fungillus, habitu *Hypoxyli* sed fructificatione (quae rarius pertecta) et indole omnino diversus.

2. **Glaziella cyttarioides** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. 5438 Cienc. Cordero a, t. 23., 1919, Extr. p. 119. — Subglobosa 20-40 mm. diam. mediocri lateraliter culmo adfixa eumque non v. vix amplexens, primò albescens, serius in tertio infero applanatulo fertilis flavida minutissime densissimeque porosa ac subvelutina, ceterum sordide fusca glabra laevis, intus fere carnoso-compacta alba; loculi dense constipati ostiolo pro ratione latissimo ($50-60 \mu$) pertusi; ascis lineares octospori, 350×10 ; sporae filiformes tenuissime fasciculatae hyalinae, $250 \times 1-1,5$.

Hab. ad ramos vivos *Guadua* sp. (Graminaceae), in silvis Coaguazú, Americae austr. trop. (B. BALANSA). — Colore *Mycomalo bambusino* Möll., forma *Ascopolyporo polychroo* Möll. affinis sed ceterum diversa.

Sect. 3. Phaeosporae

MELANOSPORA Corda — Syll. II p. 461, IX p. 950, XI p. 356, XIV p. 626, XVI p. 563, XVII p. 781, XXII p. 452.

1. **Melanospora Asparagi** G. Arnaud, Ann. Service Épiphyties t. 2., 1915, 5439 p. 273, cum icon. (absque diagn.). — Peritheciis sphaeroideis nigris 200μ circ. cr. collo brevi terminatis, parietibus translucidis, flavo-brunneis; ascis mox diffluentibus et tunc aegre visibilibus; sporidiis breviter fusoideis brunneis, 17×1 . — Status conidicus quan-

doque in culturis tantum visus, ad gen. *Stilbum* pertinens, et verisimiliter cum *Melanospora* connexo.

Hab. in caulibus *Asparagi officinalis* (Asparagaceae), quos valde vexat, Montpellier, Gallia.

2. *Melanospora rhizophila* Pegl. et Sacc., Ann. Mycol. 11., 1913, p. 16. — 5440

Peritheciis subsparsis, v. gregariis, minutissimis, superficialibus, globulosis, 150-200 μ diam., in ostiolum cylindraceum, 160 \times 30, apice fimbriatum abrupte tenuatis, hinc phialiformibus, glabris, luce directa nigricantibus, contextu vero tenuiter carnosulo, sordide roseo, perithecii minute parenchymatico, ostioli prosenchymatico; ascis ovato-oblongis, 50-55 \times 20-22, subsessilibus, octosporis, paraphysatis, mox evanidis; sporidiis distichis ellipsoideo-limoniformibus, h. e. utrinque apiculatis, primo brunneis grosse 1-guttulatis, dein fuliginis.

Hab. in radicibus putrescentibus *Cucurbitae Peponis* (Cucurbitaceae), Ferrara, Ital. bor. socia *Fusarii* specie forte ejusdem statu conidiophoro (V. PEGLION). — Affinis *Melanosporae vervecinae*, a qua glabritie et minutie omnium partium dignoscitur. Perithecia interdum etiam intra radículas putres matricis inveniuntur.

3. *Melanospora papillata* Hobson, Proc. Amer. Acad. 1912, p. 251 t. II 5441

fig. 1-26. — Peritheciis sparsis v. gregariis, superficialibus, membranaceis, semidiaphanis, stramineis v. laete brunneolis e globoso piriformibus, 400-500 \times 350-450, papilla setis erectis, subdivergentibus, continuis, 100-170 μ longis superata; ascis clavatis; sporidiis inaequilateris, lunulatis, 25 \times 10, e flavido brunneis, demum nigris; conidiis copiosis, e sphaerico ovoideis pseudobasidiis phialiformibus suffultis; bulbillis flavido-brunneis, multicellularibus, ambitu irregularibus, 50-60 μ diam., interdum amplioribus.

Hab. in cortice vivo *Quercus agrifoliae* (Cupuliferae), Pomona California, Amer. bor.

4. *Melanospora anomala* Hobson, Proc. Amer. Acad. 1912, p. 257, t. II 5442

f. 27-30, tab. III f. 1-15. — Peritheciis sparsis v. gregariis, superficialibus, membranaceis, e stramineo brunneolis, globosis v. subglobosis, 350-450 \times 250-350, ostiolo inconspicue papillato, calvo; ascis....; sporidiis inaequilateris, sublunulatis, 28 \times 14 e flavido brunneo-nigricantibus; conidiis e sphaerico ovoideis, hyalinis, pseudobasidiis phialiformibus suffultis; bulbillis multicellularibus flavido-brunneis subglobosis, 70-140 μ diam., v. elongatis usque ad 180 μ .

Hab. in fructibus *Aesculi Hippocastani* (Hippocastanaceae), (spanish-chestnuts, ex Hispania?), Boston, Amer. bor.

5. *Melanospora mattiroliana* Mirande, Bull. Soc. Mycol. Fr. XXXII 1916, 5443 p. 72 fig. 1-3. — Peritheciis gregariis, superficialibus, subglobosis, 240-340 μ diam., pallide flavidis, translucidis, pilis hyalinis, septatis conspersis; ostiolo cylindraceo recto v. curvulo, concolori, 195-360 \times 59-65, interdum multiplici, apice fimbriato; ascis late clavatis, 8-sporis, 50-60 \times 25-30, crassiuscule pedicellatis, mox diffuentibus, filiformi-paraphysatis; sporidiis e globoso late ellipsoideis, utrinque acuminatis, 14-24 \times 11-19, fusco-olivaceis, crebre guttulis, fusco-olivaceis, demum in massam mucosam nigricantem expulsis.

Hab. in foliis et caulibus plantarum, Grenoble, Galliae. — Simul occurrit st. conidiophorus *Spicariae* sp. referens, conidiophoris 50 μ longis, acro pleurogene sporiferis, pseudobasidiis (phialis) verticillatis v. subsparsis, ventricosus, apice acutis; conidiis ellipsoideo-teretiusculis, 15-20-catenulatis, 25-9 \times 2. A *Mel. globosa* ostiolo breviori, paraphysum praesentia, a *Mel. gibelliana* sporidiis subglobosis videtur distincta.

6. *Melanospora Mangini* Vincens, Bull. Soc. Mycol. Fr. 33., 1917, p. 69, 5444 c. icon. — Peritheciis superficialibus, sparsis v. aggregatis, globulosis, 200-350 μ diam., collo cylindraceo, brevi, truncato, ciliis destituto; initio succineis dein brunnescentibus; ascis copiosis clavatis 40-50 \times 10-15, facile diffuentibus, parce paraphysatis; sporidiis limoniformibus, atro-brunneis, 15-20 \times 10-12, episporio leviter long. ruguloso-plicato; forma conidica *Spicariae* affinis decumbens; pseudobasidiis sparsis, phialiformibus 7-10 \times 2,5-3; conidiis hyalinis ovoideis v. ellipsoideis, 3-5 \times 1,5-2,5.

Hab. in ligno putrescenti (*bois bleu*), in Gallia (MANGIN).

7. *Melanospora curvicola* Hobson, Proc. Amer. Acad. 1912, p. 254, t. III 5445 f. 16-24. — Peritheciis sparsis v. gregariis, superficialibus, membranaceis, semidiaphanis, stramineis dein brunneolis, e globoso piri-formibus, 450-550 \times 350-450, rostello definito, 85-140 μ longo praeditis; setulis terminalibus 100-170 μ longis, erectis, subdivergentibus, continuis acutis subulatis; ascis....; sporidiis inaequilateris, sublunulatis, 25 \times 10 e flavido brunneo-nigricantibus; conidiis hyalinis e sphaerico ovoideis pseudobasidiis phialiformibus suffultis; bulbillis multicellularibus flavido-brunneis, irregularibus, 50-60 μ diam., rarius 100 μ .

Hab. in fimo cuniculorum, Cambridge Mass., Amer. bor. (THAXTER). — Praeter conidia descripta, occurrunt formae *Hargiae* et *Acremoniae* adscribendae.

8. *Melanospora Schmidtii* P. A. Saccardo n. sp., *Melanospora* sp. Afr. 5446
 Schmidt, Jahresh. Schles. Gesellsch., 1912, p. 22. — Peritheciis initio subiculo albo effuso immersis, flavo-brunneis v. subrubellis, solitariis, sparsis, globosis, pilis septatis, hyalinis, divergentibus conspersis, 210-320 μ diam., totis 400-900 μ altis, ostiolo cylindraceo apice fisso 400-500 μ alto, basi 50 μ cr., contextu parenchymatico subdiaphano, cellulis globoso-angulosis 9-12 μ diam.; ascis 8-sporis, mox diffusis; sporidiis ellipsoideis, utrinque apiculatis, 22-24 \times 15,5-17, opace atro-brunneis, apiculis minutis, hyalinis.

Hab. in fimo caprearum, Amani, in Africa orient. — Diagnosis satis plena ut species nomine proprio distingui mereatur.

- SPHAERODES** F. E. Clements, Genera of Fungi 1909, p. 44 et p. 173. — 5447
 Est *Sphaeroderma* esubiculatum. Typus gen *Sph. episphaericum* (Ph. et Pl.) F. E. Clen. — Cnfr. Syll. II p. 460. — Si hoc nov. gen. validum, vero *Vittadinula* Sacc. vocandum (Syll. II p. 560).

- RHYNCHOMELAS** F. E. Clements, Genera of Fungi 1909, p. 44, 173. — 5448
 Est *Melanospora* stromatica. Typus *M. arenaria* Mont.

HYPOXYLINA Starb. — Syll. XXII p. 453.

1. *Hypoxylina philippinensis* Rehm, Ascom. Philippin. VII, in Leaflet. 5449
 of Philippin. Bot. VIII, 1916, p. 2921. — Perithecia sessilia, plerumque 2-4 in caespitulis orbicularibus 2 mm. latis, arcte congregata, atra, glabra, sphaeroidea, mox patellaria, distincte marginata, 0,3-0,8 mm. lata, sicca valde corrugata, ad basim distincte parenchymatica, versus marginem ex cellulis circa 20 \times 10; pseudoprosenchymatice contexta nigro-coerulea; ascis clavatis, apice rotundatis et crasse tunicatis, 80-90 \times 12, 8-sporis; 1-sporis ellipsoideis, 1-cellularibus, glabris, subfuscis, 12-15 \times 7, 2-versus basim 1-stichis; paraphysibus hyalinis, vix visibilibus.

Hab. ad ramos emortuos *Derris philippinensis* (Leguminosae), Los Baños, Ins. Philipp. (O. F. BAKER).

COLLETOMANGINIA Har. et Pat. — Syll. XXII p. 454.

1. *Colletomanginia paradoxa* Har. et Pat. — Sacc., Syll. l. c.

5450

Hab. ad truncos *Abietis pectinatae* (Coniferae), in M. Bo child, Africa orient. britannica (ROTSCHILD!). — Cl. Hariot in litt. declarat etymon generis, non ut explicatur in Syll. l. c. sed ex *colletos*, junctus et *Manginia* derivatum, sed ratio pariter me latet (Sacc. in ms.).

DASYPTHORA F. E. Clements, *Genera of Fungi* 1909, p. 45, 173. — 5451
Est *Nectria pilosa*. — Typus *D. lasioderma* (Ell., in *Nectria*, Syll. II p. 505).

Sect. 4. Hyalodidymae

NECTRIA Fr. — Syll. II p. 479, IX p. 955, XI p. 357, XIV p. 628,
XVI p. 565, XVII p. 778, XXII p. 455.

I. Eu-Nectria

1. *Nectria Funtumiae* Massee, *Kew Bull., Miscell. Inf.* 1909, p. 147. — 5452

Caespitulis erumpentibus minutis, 3-6 peritheciigeris, sparsis; peritheciis globoso-depressis, glabris, levibus, coccineis, 350-400 μ diam., ostiolo crasse obtuseque papillato brunneo instructis; ascis cylindraceis, apice obtusis, rotundatis, octosporis; sporidiis oblique monostichis, ellipsoideis, hyalinis, 1-septatis, 14-15 \times 6.

Hab. parasitica in truncis vivis *Funtumiae elasticae* (Apocynaceae) quos necat, Kew, Anglia. — A *N. ditissima* peritheciis gregarie sparsis, latioribus, ostiolo magis prominenti differt.

2. *Nectria meliolicola* F. L. Stevens, *Bot. Gazette*, 65., 1918, p. 231. — 5453

Amphigena. Maculis nullis, mycelio albo, *Meliolae* et folio arcte adpresso; peritheciis minutissimis 50-60 μ cr., hyalinis, apice pilosis, pilis 15 μ long.; ascis e ovatis ellipsoideis, obtusis stipitatis, 40-45 \times 11-14; sporidiis oblique 1-seriatis, uniseptatis, hyalinis, linearibus, acutis, 24-28 \times 3-4.

Hab. in foliis *Casariae silvestris* (Flacourtiaceae), parasitica *Meliolae Paullinae* St. (Fungi) et socia cum *Fusario*, Mayaguez, Porto Rico.

3. *Nectria Albizziae* Woronichin, ? *Ann. Horto Bot. Tiflis*, 1920, Extr. 5454

p. 20, fig. 7. — Stromatibus pulviniformibus, erumpentibus, pallide testaceis; peritheciis caespitosis, ceraceo-mollibus, levibus, 5-30 in quoque stromate, sphaeroideis, papillatis, 200-235 μ diam.; ascis cylindraceis, apice leviter attenuatis, breviter pedicellatis, 44-49,5 \times 6-6,6; sporidiis elongato-ellipsoideis, hyalinis, uniseptatis, monovel distichis, 9,9-11,6 \times 3-3,3.

Hab. in ramis subvivis *Albizziae Julibrissin* Boiss. (Leguminosae), Caucasus, distr. Batum, pr. Tshakva, Asia occ. (SE-REBRJAKOV).

4. *Nectria sordescens* Sacc., *Notae Myc.* XXIII p. 69 (Accad. Veneto- 5455

trent. 1917). — Peritheciis in acervulos minutos 0,5-1 mm. latos

gregarios 6-10 confertis, globosis, breviter papillatis non collabentibus, extus sordide fusco-purpureis, non omnino levigatis; contextu parenchymatico rubro; ascis tereti-fusoideis, apice obtusulis lumineque 2-foveolatis, $60 \approx 6$, octosporis; paraphysibus cylindraceutis spuriis (ascis ineolutis ?); sporidiis distichis oblongis, apice rotundioribus, 1-septatis, non constrictis, $11,5-12 \approx 4,5$, obsolete 2-4-guttulatis, hyalinis.

Hab. in ramis emortuis *Leucaenae glaucae* (Leguminosae), Los Baños, Ins. Philipp. (M. B. RAIMUNDO, comm. BAKER).

5. *Nectria portoricensis* F. L. Stevens, Bot. Gazette, 65., 1918, p. 231. — 5456
Coloniis subcircularibus 3-7 mm. diam., albis, centro fertilibus peritheciis extus sterilibus, mycelio parasitico albo effuso copioso; peritheciis rubris, parvis, levibus, 160μ cr.; ascis obovatis, obtusis, $25-36 \approx 8$; sporidiis oblique monostichis, oblongis, hyalinis, v. e pallidis chlorinis, uniseptatis, obtusis, $12 \approx 3$.

Hab. in foliis *Banisteriae laurifoliae* (Malpighiaceae), parasitica *Meliolae rectangularis* (Fungi), Jayuya, Porto Rico.

6. *Nectria viridula* Pat., Bull. Soc. Mycol. de Fr., 1913, p. 224. — Pe- 5457
ritheciis plerumque 2-5 in stromate minuto aggregatis, globosis $\frac{1}{4}-\frac{1}{3}$ mm. diam., ostiolo depressis, carnosis, flavo-viridibus, pruina aureo-virescenti tectis, rimosulis sed non villosis, pruina secedenti ochraceis; contextu parenchymatico e cellulis angulosis 15μ circ. cr., flavidis; ascis octosporis $40-60 \approx 5-6$, aparaphysatis; sporidiis navicularibus, levibus, hyalinis, uniseptatis, saepe quadriguttulatis $13-15 \approx 5-6$.

Hab. in cortice *Syringae japonicae* (Oleaceae), Chi Nè, Tonkin Cina, Asia (DUPORT).— Species minuta *N. chlorellae* et *N. chrysites* proxima.

7. *Nectria Orchidearum* Theissen, Ann. Mycol. IX, 1911, p. 48, tab. VI 5458
fig. 65. — Peritheciis sparsis, botryose aggregatis v. solitariis, globosis, subapplanatis, fusco-aurantiacis, papilla concolore vix perspicua $200-250 \mu$ diam., floccosula, ostiolo pertusulis; ascis cylindraceutis, breviter pedicellatis, supra rotundatis, p. sp. $52-60 \approx 5-6$; sporis oblique monostichis v. subdistichis, hyalinis, oblongis v. ellipsoideis, utrinque angustato-rotundatis, medio non constrictis, utraque cellula biguttulata, $10 \approx 4$.

Hab. in pedunculo *Orchidaceae* epiphytae ignotae, São Leopoldo Rio Grande do Sul, Brasiliae (RICK).— Teste Rehm *Nectriae Pandani* Tul. affinis.

8. *Nectria fusco-purpurea* Wakefield, Bull. Misc. Inform. Kew 1918, 5459

p. 232.— Stromatibus dilute lateritiis, ceraceis, applanatis, 4-8 mm. long. 1-2 mm. latis, per rimas transversas corticis erumpentibus, primo conidia gerentibus; conidiis cylindraceis, utrinque obtusis vix curvulis $8-11 \times 2-2,5$; conidiophoris simplicibus v. ramosis hyalinis $1,5-2 \mu$ diam. Peritheciis dense constipatis compressione laterali deformibus, stromatibus obscuratis, sessilibus, fusco-purpureis, carnosulis, contextu parenchymatico rubro, sicco collapsis pezizoideis, rugulosis, $0,25$ mm. diam., ostiolo minuto pertusis; ascis cylindraceis, octosporis, $80-90 \times 10-12$; paraphysibus filiformibus, ramosis, hyalinis, $1,5 \mu$ diam.; sporis monostichis v. subdistichis, variabilibus oblongis, utrinque obtusis, medio 1-septatis, interdum 2-3 septatis, ad septa constrictis, $14-33 \times 4,5-8,5$.

Hab. ad ramos emortuos *Pruni domesticæ* (Rosaceae) cultae (« Pond's Seedling »), Wisbech, Anglia (J. C. F. FREYER, A. D. COTTON).

9. *Nectria Jodinae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII, p. 74 (1912). — Peritheciis hinc inde gregariis vel caespitosis in stromatibus vetustis *Tuberculariae Jodinae* Speg., udis globosis, siccis eximie cupulato-collapsis, 200μ diam., membranaceis, primo albo-farinosulis dein nudis succineis, contextu parenchymatico melleo, circa ostiolum minore ac fuscescente; ascis cylindraceis, apice obtuse rotundatis, basi breviter pedicellatis, $80-100 \times 10-15$, paraphysatis vel pseudoparaphysibus parvis mixtis; sporidiis oblique monostichis, ellipsoideo-cylindraceis, utrinque obtuse rotundatis, medio septatis, vix constrictis, hyalinis, $14-16 \times 6-7$, loculis grosse 1-guttatis.

Hab. in ramis dejectis putrescentibus *Jodinae rhombifoliae* (Santalaceae), in horto La Plata, Argentina.

10. *Nectria badia* A. Maublanc, Bull. Soc. Mycol. de Fr., XXXVI, 1920, p. 35, tab. II fig. 12-17. — Mycelio in stromatibus vetustis *Phyllachorae subintermediae* evoluta, ex hyphis dense aggregatis formato; stromatibus erumpentibus, exsertis, pulvinatis, minutis, $0,5-1,5$ mm. diam., badiis, textura coriaceo-carnosa, hyphis parallelis; peritheciis subsuperficialibus, concoloribus, sphaeroideis, gregariis, minutis (circ. 150μ diam.), sicco collabescentibus, apice pertusis, superficie pilis hyalinis, brevibus, velutinis, contextu minute celluloso; ascis clavatis v. subfusoides, fere sessilibus, obtusis, diffuentibus, $55-70 \times 12-16,8$ -sporis; sporidiis distichis v. fere conglobatis, oblongis v. fusoides-clavato-oblongis, utrinque attenuato-obtusis, medio v. prope medium 1-septatis, leniter constrictis, hyalinis, $20-$

30 \times 4,5-7; acervulis conidiophoris in eisdem stromatibus evolutis, subcupulatis, albidis; conidiis fusoides-oblongis, rectis, obtusiusculis, hyalinis, continuis, dein medio 1-septatis, non constrictis, 15-25 \times 3,5-4, in basidiis acicularibus, simplicibus, usque ad 100 μ longis, 1,5-2 μ crassis, densis aerogenis.

Hab. in foliis Sapindaceae cujusdam, Niteroy, Brasiliae (Herb. Mus. R. JAN).

11. *Nectria Cainitonis* P. Henn., Hedw., vol. 48. (1908) p. 104. — Peri- 5462
thecii caespitose erumpentibus, subglobosis, cinnabarinis, granulato-verrucosis, 180-200 μ diam., obtuse papillatis; ascis clavatis, obtusis, octosporis, 60-70 \times 8-11; sporidiis monostichis vel subdistichis, ovoideis vel subfusoides, utrinque obtusis, medio 1-septatis, 2-4-guttulatis, hyalinis, 10-18 \times 4-5.

Hab. in corticibus Lucumae Cainitonis (Sapotaceae), hort. botan. Goeldi, Pará, Brasiliae (BAKER).

12. *Nectria inventa* Pethybridge, Trans. Brit. Mycol. Soc. 6., P. II, 5463
1918, p. 107, tab. III, fig. 1-5. — Peritheciis gregariis, globosis, atro-rufis, superiore parte pilosis, 300-500 μ diam., paraphysibus filiformibus dein obsolete, 150 \times 3-4; ascis cylindricis, vel cylindraceo-clavatis, 60-100 \times 4-6, octosporis; sporidiis monostichis, oblongis, hyalinis, 1-septatis, 9-10 \times 4-5.

Hab. in tuberibus putresc. Solani tuberosi (Solanaceae), in Hirbernia. — Status conid. sistit *Verticillii cinnabarii* R. et B. (*Acrostalagmi cinnabarii* Corda).

13. *Nectria cinnabarina* Fr. — Syll. II, p. 479 — var. *effusa* Theissen, 5464
Ann. Mycol. IX, 1911, p. 52, tab. VII fig. 74. — Stroma late effusum cinnabarinum; peritheciis 300-400 μ diam. globosis, minute papillatis, arcte aggregatis; ascis 80-100 \times 8-12 cylindraceis, hinc inde ventricose dilatatis; sporidiis monostichis v. imbricate distichis, oblongis, 18-24 \times 7-8,5, longitudinaliter striatis, utrinque rotundatis, non v. vix constrictis, paraphysibus ramosis, guttatis, 2-2,5 μ crassis.

Hab. in cortice cujusdam, Rio Grande do Sul, Brasiliae (RICK). — A typo differt stromatibus horizontaliter effusis, colore vividiore sporisque majoribus. — var. *Daphnes* Rehm, Ann. Mycol. XIII, 1915, p. 2.

Hab. ad *Daphnem Mezeream* emortuam (Thymeleaceae), Ruckberg prope Renbendorf-Rhön, Franconiae (ADE).

14. *Nectria coccinea* (Pers.) Fr. — Syll. II p. 481. — var. *sordidula* 5465
Sacc., Notae Mycol. XXII p. 190 (R. Accad. Pad. 1917). Distinguitur

peritheciis sordide coccineis, saepe collabescentibus, modo caespitulosus, modo subsparsis; ascis 38-40 \times 9-10; sporidiis oblongis, leviter constrictis, 10-12,6 \times 3-4, hyalinis, (hinc quam in typo paullo angustioribus; nec 2-guttatis visis).

Hab. in corticibus subvivis, Filfil, Erythraea, Africae.

15. *Nectria flavido-carnea* Rehm, Ascom. Philippin. VII, in Leaflet of 5466
Philippin. Bot. VIII, 1916, p. 2922. — Perithecia 20 botryose arete congregata in acervulis 1-2 mm. latis, superficialia, globulosa, 0,15-0,2 mm. lata, citrino-flavida, glabra, minutissime papillulata, ad basim hyphis hyalinis, 30-100 \times 3 obsessa, sicca collabentia, dilute carneola, albido-pruinosa. Ascis cylindraceo-clavatis, circa 80 \times 15 8-sporis; sporis oblongis utrinque obtusis, medio septatis non constrictis, utraque cellula magniguttata, 20 \times 8, 1-3-stichis. Paraphysibus nullis. Ad basim conidia sporarum formae 8 \times 4,5 in hyphis brevibus.

Hab. ad sarmentum emortuum, Los Baños, Ins. Philipp. (C. F. BAKER). — *Nectriae pityrodes* Mont. proxima.

16. *Nectria conferta* Syd., Engler Bot. Jahrbüch. 54., 1916, p. 255. — 5467
Peritheciis in tumoribus matricis minutis dense confertis, stromate nullo, superficialibus, cinnabarinis, in sicco collapsis, globulosis, 160-200 μ diam., glabris, levibus, ubique parenchymatice ex cellulis angulato-globosis vel ellipsoideis 15-20 μ longis 10-15 μ latis, tenue tunicatis (membrana 1,5-2 μ crassa) compositis, pariete ca. 20 μ crasso, vertice papilla hyalina distincte radiato-fibrosa humili ca. 25 μ alta et 35-40 μ lata praeditis, basi hyphis paucis tenuibus suffultis; ascis clavatis, tenue tunicatis, sessilibus, filiformiter paraphysatis, 32-45 \times 9-12, octosporis; sporidiis oblique monostichis vel pro parte distichis, ellipsoideis vel oblongo-ellipsoideis, utrinque obtuse attenuatis, saepe etiam vix attenuatis, medio distincte septatis non constrictis, hyalinis, tenuissime striatis, 10-12 \times 5-6.

Hab. ad corticem emort. arboris cujusdam, prope Sepik, Nova Guinea Nord-or., Africae (LEDERMANN).

17. *Nectria gallifera* Pat., Bull. Mycol. de Fr., 1913, p. 225. — Stro- 5468
mate minuto e cortice erumpente, duro, peritheciis 2-8-aggregatis efformato; peritheciis globosis basi attenuatis v. turbinatis, convexis, papillato-ostiolatis dein collabescentibus et cupuliformibus, laxè obtuseque asperulo-rugosis, pallide carneis, stromate obscuriore quandoque brunnescenti; nucleo rubro; ascis longe stipitatis, octosporis; sporidiis pallide roseis, levibus rectis v. curvatis, uni-septatis, septo vix constrictulis, magnis, 22-27 \times 8-10; trama e cel-

lulis carneis, angulosis circ. 10 μ diam. efformata.

Hab. ad cortices emortuas, Chi Nè, Tonkin Cina, Asia (DUFORT). — Perithecia saepe plus minus abnormiter galliformiter inflata animalculorum opè quorundorum.

18. *Nectria striatula* H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 5469 373. — Stromatibus corticalibus, sanguineis, suborbicularibus, erumpentibus, 0,5-1 mm. diam., contextu aurantiaceis, parenchymaticis; peritheciis 3-12 in quoque stromate, subglobosis 150-300 μ diam., ostiolis papillatis; ascis cylindraceutis, 100 \times 8, octosporis, evanescentibus, aparaphysatis; sporis monostichis, ellipsoideis, utrinque obtusis, ad medium 1-septatis, non constrictis, olivaceis, membrana longitudinaliter striolata praeditis.

Hab. in trunco emortuo speciei indeterminatae, in silvis pr. Sangirin Alabat, Ins. Philipp. (MERRILL).

II. *Dialonectria*

19. *Nectria bomba* T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 127. — Peritheciis sparsis v. confertis stromate destitutis, rubro, latericiis, opacis minutissime rugosis, quandoque minutissime flavo-granulatis; ostiolo conoideo in area rubra insidenti, demum nigrescenti; parietibus crassis pseudoparenchymaticis et e-cellulis infra usque 12 μ diam. supra plus minus obscuris et opacis; ascis primum subcylindraceutis apice truncatis, circ. 80 \times 8, octosporis; ascis et paraphysibus mox diffuentibus subgelatinosis; sporidiis oblique monostichis e ovoideis cymbiformibus leniter v. non constrictis, apicibus obtusis, 10-16 \times 4,5-6.

Hab. ad truncum emortuum Hevea (Euphorbiaceae), Peradeniya Ceylon, Asia.

20. *Nectria calonectricola* P. Henn., Hedw., vol. 48. (1908) p. 195. — 5471 Peritheciis sparsis vel gregariis, in caespitulis *Calonectriae* parasiticis, ovoideis vel subglobosis, cinnabarinis, papillatis, 170-200 μ diam.; ascis cylindraceuto-clavatis, obtusis, octosporis, 55-60 \times 5-7; sporidiis oblique monostichis vel subdistichis, ellipsoideis, utrinque rotundatis, 1-septatis, hyalinis, 8-12 \times 4-5.

Hab. in *Calonectria* (Fungi) ad *Hibiscum schizopetalum* (Malvaceae), hort. botan. Goeldi, Pará, Brasilia (BAKER).

21. *Nectria perpusilla* Sacc., Ann. Mycol. XI, 1913, p. 546. — 5472 Parastica, perexigua; peritheciis globoso-conoideis, 70-80 μ lat., 84-90 μ alt., sordide roseis, glabris, ostiolo non emergente, periphysato praeditis, basi hyphulis mycelialibus cinctis; contextu tenerrimo,

laxe parenchymatico; ascis rosulatis, fusoides, $40 \approx 14$, sensim brevissime pedicellatis, octosporis, apice rotundatis; sporidiis distichis, medio subtristichis, tereti-oblongis, utrinque rotundatis, rectis, levibus, $11-12 \approx 3$, hyalinis.

Hab. parasitice in thallo *Meliolae clavulatae* (Fungi), ad folia *Pomoeae* sp. (Convolvulaceae), Oaxaca, Mexico (BONANSEA).

22. *Nectria Meliolae* (Syd.) Saccardo, *Epinectria* (n. gen.) *Meliolae* Syd., 5473

Ann. Mycol. 15., 1917, p. 215. — In mycelio *Meliolae* parasitica; mycelium parce evolutum, ex hyphis hyalinis usque pallide flavidulis subflexuosis $2-4 \mu$ crassis remote septatis compositum; perithecia plerumque gregaria, sed discreta globosa, $90-140 \mu$ diam., superficie (mox parce mox copiosius) hyphis subhyalinis brevibus obtusis $3-4 \mu$ crassis obsessa, primitus hyalino-flavidula, dein succinea, poro minuto aegre perspicuo, pariete ca. 10μ crasso irregulariter parenchymatice contexta, paraphyses genuinae nullae; asci sessiles subfusoides vel cylindracei, $25-30 \approx 5-7$, octospori; sporae plerumque oblique monostichae, cylindraceae vel oblongae, utrinque obtusae, hyalinae, medio septatae, non constrictae, $9-10 \approx 1,5-2$.

Hab. parasitica in mycelio *Meliolae*, aff. *M. substenosporae*, (Fungi), ad folia graminis ejusdam, Sorsegon, Luzon, Ins. Philipp. (M. RAMOS).

23. *Nectria poricola* Theissen, Ann. Mycol. IX, 1911, p. 53. — Peri- 5474

theciis solitariis, ad os tubulorum *Poriae* vetustae nidulantibus, aurantiacis, globosis, circ. 240μ diam., leniter floccosis, poro imperispicuo; ascis cylindraceis, breviter pedicellatis, $80-90 \approx 6-7$; sporidiis hyalinis, monostichis, ellipsoideo-oblongis, utrinque angustatis, non constrictis, episporio distincte verrucoso, $15-18 \approx 5-6$, rectis v. subinaequilateralibus.

Hab. in hymenio *Poriae* sp. (Fungi), vetustae, Rio Grande do Sul, Brasiliae.

24. *Nectria discoidea* T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5475

Peradeniya v. 7., P. II, 1920, p. 126. — Peritheciis sparsis superficialibus, pallide brunneis, opacis collabescentibus et demum discoideis, $0,2$ mm. diam., centro depressis levibus; parietibus tenuibus pseudoparenchymaticis et e cellulis usque 12μ latis crasse tunicatis, luce transmissa pallide brunneis, ostiolo non prominenti; ascis clavatis, octosporis, $35-45 \approx 6-8$; sporidiis oblique monostichis v. distichis, hyalinis anguste ovoideis, utrinque obtusis, 1-septatis septo non constrictis, levibus, $10-14 \approx 3,5-4$.

Hab. ad *Xylariam* (Fungi) vetustam, Hakgala Ceylon, Asia.

25. *Nectria lecanodes* Ces. — Syll. II p. 499 — var. *euryspora* Vouaux, 5476

Bull. Soc. Mycol. de Fr., 1912, p. 188. — Peritheciis magis sphaeroideis quam in typo, non collabescentibus; ascis 60-70 \times 9-10, octosporis; sporidiis monostichis latioribus quam in typo, 10-12 \times 6-7, grosse biguttulatis.

Hab. in *Pannaria plumbea* (Lichenes), Mons Hérault, Gallia (A. DE CROZALS).

26. *Nectria Spegazzinii* Vouaux, Bull. Soc. Mycol. de Fr., 1912, p. 189. — 5477

Ita dicatur *Nectria lichenicola* Spegazzini, non *N. lichenicola* (Ces.) Sacc., Syll. II p. 498.

27. *Nectria Verrucariae* Vouaux, Bull. Soc. Mycol. de Fr., 1912, p. 186. — 5478

Peritheciis sparsis v. subgregariis thallo omnino immersis vix prominulis rubro-aurantiacis, papillula minuta mox nigrescente auctis, sphaeroideis 150-200 μ diam., ostiolo periphysibus rectis brevibus septatis praedito; contextu crasso, cellulis aurantiacis parum distinctis guttulis oleosis aurantiacis faretis; ascis cylindraceo-fusoideis, utrinque fortiter acutatis, basi breviter nodulosis, plerumque oblique tetrasporis saepe etiam bisporis, rarissime esasporis, 59-62 \times 9-11; paraphysibus bifurcatis pluriguttulatis mox evanidis; sporidiis oblongo-fusoideis, utrinque attenuatis sed obtusis, saepe inaequilateris, hyalinis, 1-septato-constrictulis, quadri- v. biguttulatis 17-20,5 \times 7

Hab. in thallo *Verrucariae integrae* (Lichenes), ad saxa calcarea, Dunkerque, Gallia bor. (BOULY DE LESDAIN).

28. *Nectria variabilis* Hara, Bot. Mag. Tokyo v. 28., 1914, n. 332, cum 5479

icon. — Sporodochiis irregulariter errumpentibus, rubro-aurantiacis v. roseis, plerumque 1-2 (raro 3) 0,5-1 mm. diam.; conidiophoris filiformibus, septatis, basi ramosis, 2,5-3 μ cr.; sporis fusariformibus, hyalinis, 3-5-septatis, 60-70 \times 5-6; paraphysibus filiformibus, hyalinis, septatis, 2-2,5 μ cr.; peritheciis stromaticis v. basi sporodochiorum ortis, globosis v. ellipsoideis, ostiolo papillato praeditis, solitariis v. caespitosis, levibus, carneis, membranaceis, rubro-aurantiacis, 270-300 μ diam.; ascis cylindraceo-clavatis, apice rotundatis, stipitatis, octosporis, 130-150 \times 11-13; sporis monostichis, fusoides v. ellipsoideis, 1-septatis, septo non v. leniter constrictis, 16-22 \times 6-9, hyalinis v. flavis; paraphysibus filiformibus 1-1,5 μ cr.

Hab. in *Coccidiis* (Insecta) *Sasam paniculatam* (Graminaceae) infestantibus, Kawaue-mura, pr. Mino, Japonia.

29. *Nectria Leucaenae* Rehm, Ascom. Philippin. VII, in Leitf. of Phi- 5480

lippi. Bot. VIII, 1916 p. 2923. — *Perithecia gregaria*, plerumque in maculis epidermidis albidulis sessilia, globulosa, glabra, minutissime papillulata, demum umbilicata, 0,2 mm. lata, ferrugineo-rubra, parenchymatice contexta, cellulis-20 μ latis; ascis cylindraceo-clavatis, 70 \times 10-12, 8-sporis; sporis ellipsoideis, medio septatis, non constrictis, hyalinis, 10 \times 5, 2-stichis; paraphysibus nullis.

Hab. ad emortuam *Leucaenam glaucam* (Leguminosae), Los Baños, Ins. Philipp. (M. B. RAIMUNDO). — *Nectriae Bulbophylli* P. Henn. proxima.

30. *Nectria flageoletiana* Sacc., Notae Mycol. XXII (R. Acc. Pad.) 1917, 5481 p. 161. — Peritheciis hinc inde dense gregariis, superficialibus, globoso-depressis, umbilicatis (*Pezizellae* ad instar) glabris, levibus, nitidulis, amoene dilute roseis, centro paullo saturatioribus, 400 μ diam., carnosulis; contextu parenchymatico dilute flavido-roseo; ostiolo exiguo, impresso; ascis fusoides, basi breviter tenuatis, apice summo obtusulis, lumineque bifoveolatis, obsolete paraphysatis, octosporis, 55-58 \times 4,7-5; sporidiis oblique monostichis v. subdistichis, breviter fusoides, rectis curvulisve utrinque obtusulis, medio obsolete 1-septatis, non constrictis.

Hab. in ramulis corticatis *Pruni Laurocerasi* (Rosaceae) emortuis, Rigny, Gallia (FLAGEOLET). — Socia adest commixta forma *Turbeculariae granulatae* Pers. quae sine dubio st. conidium ejusdem sistit.

31. *Nectria Theobromae* Masee, Bull. Bot. Garden Kew, 1908, p. 5482 218. — Peritheciis gregariis vel sparsis, superficialibus, ovatis, 0,5 mm. altis, levibus, glabris, aurantiaco-rubrescentibus, ostiolo minuto vix prominulo hiantes; ascis cylindraceis, pedicellatis, octosporis; paraphysibus septatis, ascos excedentibus, hyalinis, apice vix incrassatis, interdum flexuosis, 3 μ cr.; sporidiis oblique monostichis, hyalinis, ellipsoideis, 1-septatis, ad septum subconstrictis, 28-30 \times 8-10.

Hab. in areis sanguinolentis corticis *Theobromae Cacao* (Sterculiaceae), Grenada, Indiae occid. (HOWARD). — A. N. Bainii Mass. facile distincta.

32. *Nectria cancri* Rutgers, Ann. Jard. Bot. Buitenz. 1913, p. 2 t. I 5483 p. 62, *Hypomyces cancri* (Rutg.) Wollenw., Journ. Agric. research II p. 271 t. XIII f. J. et XV f. B. C. — Peritheciis gregariis globulosis asperis vertice conicis levibus, 350-450 μ altis, 275-375 μ cr.; sporidiis 10-15 \times 5-6,7; conidiis (*Fusarium*) 3-septatis 30-45-3,7-5; rarius 4-5-septatis 30-55 \times 3,7-5,5.

Hab. in cortice canceroso *Theobromae Cacao* (Sterculiaceae), Java, et radicibus *Cannabidis sativae* (Moraceae), in Amer. bor. — Diagnosis imperfecta ex WOLLENWEBER. — Affinis dicitur *Nectr. Ipomoeae* Hals.

33. *Nectria pyrosphaera* Maire, Bull. Soc. H. N. de l'Afrique du Nord 5484

VIII, 1917, p. 80, fig. 4. — Peritheciis sparsis v. gregariis, semper discretis, sphaericis, 350-550 μ diam., levibus, glabris, aurantio-rubris, contextu pseudoparenchymatico, ostiolo papillato punctiformi, albido vix conspicuo, nucleo cirisque albis; ascis 8-sporis, cylindraceis, subsessilibus, 75-110 \times 7-9, paraphysibus nullis; sporidiis oblique monostichis, hyalinis, ellipsoideis, longitudinaliter striatis, medio septatis, ad septum non constrictis, 10-14 \times 5-6, loculis 1-guttulatis; conidiophoris (in culturis evolutis) acroniiformibus, laxis, basi septatis, subulatis, 30-80 \times 2,5-3; conidiis solitarie acrogenis, oblongo-ellipsoideis, hyalinis levibus, subinaequilateris, 6-8 \times 3-3,5.

Hab. in ligno putri *Ulm i campestris* (Ulmaceae) et *Populi albae* (Salicaceae), in Mauretania (Algeria). — Peritheciis perfecte sphaericis igneis (unde nomen) notabilis species.

34. *Nectria Berkeleyi* v. Höhn., Fragm. z. Mykol. 733, Stzsb. Akad. 5485

Wiss. Wien CXXI, 1, p. 355 (1912). — Hypostromate tenui, pallido, minute pseudoparenchymatico, erumpente; peritheciis singulis vel paucis, vel etiam 5-20 botryose acervatis, siccis rubro-ochraceis vel pallide incarnatis, globosis, non collabentibus vel in centro umbilicatis, 400-500 μ latis, ostiolo minuto subapplanato 28 μ lato, circumcirca verrucis acutiusculis 60 μ altis et 100 μ latis asperato, excipulo 60 μ crasso, bistrato; ascis clavatis, sessilibus, aparaphysatis, octosporis, 90 \times 20; sporidiis ellipsoideo-oblongis, inaequilateris, utrinque rotundatis, ad septum non constrictis, 22-30 \times 8-9,5.

Hab. in corticibus, Ceylon (Berk. et Br. Fungi of Ceylon, n. 1027 sub *N. pityrodes* Mont.) — *N. Ralskii* Bk. et Br. affinis.

35. *Nectria Lesdaini* Vouaux, Bull. Soc. Bot. Fr. LIX (1912) p. 15. — 5486

Peritheciis fere superficialibus, sparsis, pulchre rubris, distincte piriformibus, 120-230 μ latis, 200-350 μ altis, ostiolo simplici pertusis, contextu tenui pseudoparenchymatico, interdum senescendo nigrescentibus et collabescentibus; ascis cylindraceis, breviter stipitatis, octosporis, 75-90 \times 5-6, paraphysibus brevibus, simplicibus vel furcatis, parce septatis, facile diffluentibus; sporidiis monostichis, ellipsoideis vel ovatis, hyalinis, 1-septatis, non vel vix constrictis, 9-10 \times 3,5-5.

Hab. in membrana, « linoleo » dicto, Versailles, Gallia. — A *N. charticola* (Fuck.) peritheciis fere superficialibus nec non sporidiis multo minoribus differt.

36. *Nectria polita* Theissen, Ann. Mycol. IX, 1911, p. 53, tab. V fig. 5487
21, VI fig. 56-57. — Peritheciis laxè gregariis, globoso-piriformibus, circ. 300-380 μ diam., laete rubris, glaberrimis, vertice late conico, circa ostiolum zona obscure brunnea nitenti pulchre cinctis; ascis cylindræis, dilutissimis, breviter pedicellatis, supra rotundatis, p. sp. 65-72 \times 8-9,5; sporis monostichis, hyalinis, ellipsoideis, rotundatis, episporio minutissime verruculoso, 10-12 \times 5, medio non constrictis.

Hab. in ramis nodosis plantae ignotae, Rio Grande do Sul, Brasiliae. — Species superficie fere artificiose polita, pulchre dichroa, vertice nitenti distincta. Externis similis *N. striatosporae* Zimm. peritheciis tamen glaberrimis sporisque recedens.

37. *Nectria Peziza* (Tode) Fr. — Sacc. Syll. Fung. II p. 501. — Subsp. 5488
reyesiana Sacc., Ann. Mycol. XII, 1914, p. 305. — Peritheciis gregariis, globoso-discoideis, carneis, 175-190 μ diam., hyphis byssinis albis cinctis, junioribus minoribus et tantum depressis, maturis umbilicato-concavis, centro papillatis; ascis cylindræis apice rotundatis, bifoveolatis, 50-60 \times 6, octosporis, subsessilibus, paraphysibus obsoletis; sporidiis oblique monostichis, elliptico-ovoideis, 9-10 \times 4,5, 1-septatis vix constrictis, hyalinis.

Hab. ad corticem emortuum indeterminatum, Los Baños, Luzon, Ins. Philippin. (S. A. REYES).

38. *Nectria innata* Theissen, Ann. Mycol. IX, 1911, p. 50, tab. V fig. 5489
13, VI fig. 60. — Peritheciis solitariis v. paucis (2-5) stromaticè junctis, prorumpentibus, basi semper innatis, globoso-piriformibus 400-500 μ diam., primo rubro-ferrugineis, mox brunneo-rubris, asperulis, vertice subapplanatis, annulo tumidulo atro-sanguineo cinctis, ostiolo pertusis; ascis ventricosò-elongatis, breviter pedicellatis, supra late rotundatis, p. sp. 100-115 \times 20-25; sporis monostichis v. distichis, hyalinis, ellipsoideis, utrinque rotundatis, leniter inaequalateralibus v. curvulis, medio non v. vix constrictis, plerumque irregulariter guttatis, typice guttis duabus grossis globosis praeditis, 30-38 \times 12-14.

Hab. ad lignum corticatum, São Leopoldo, Rio Grande do Sul, Brasiliae (RICK).

39. *Nectria confusa* v. Höhn., Fragm. zur Mykol. 753, in Sitzgsb. Akad. 5490
Wiss. Wien CXXI, 1, p. 372 (1912). — Hypostromate tenui, pallido,

minute parenchymatico, sub peridermio effuso; peritheciis singulis vel paucis, saepe dense seriatis vel in acervulos 1-2 mm. latis, planis congestis, albidulis vel luteolis (in sicco) irregulariter lobato-tuberculosis vel plerumque lobis 3-5 rotundatis, 120 μ circ. latis et longis, circa ostiolum applanatum, 30 μ circ. latum, regulariter ordinatis praeditis, 260 μ latis, ovoideis, excipulo bistratoso, 45 μ circ. crasso, superne protuberantiis 3-5 applanatis, 70-80 μ altis, 100-120 μ latis, inferne papillis verruciformibus praeditis; periphysibus in ostiolo copiosis, gracillimis; ascis clavatis, sessilibus, apice conoideo-attenuatis, 70-85 \times 12, apophysatis; sporidiis distichis, diu continuis, demum tenuiter septatis, non constrictis, ellipsoideo-fusoideis, utrinque rotundato-attenuatis, 17-22 \times 7-8.

Hab. in corticibus, Ceylon, Asia (THWAITES).

III. *Hyphonectria*. — (Cfr. *Nectriopsis* Maire).

40. *Nectria albofulta* T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5491

Peradeniya v. 7., P. II, 1920, p. 128. — Peritheciis globosis v. late conoideis, sparsis v. in parvos greges dispositis e subiculo albyssino bene evoluto ortis, minutis, 0,15 mm. diam., e rubro-flavescentibus rubro-sanguineis, translucidis, minutissime rugosulis, ostiolo minuto conoideo praeditis; tunica perithecii tenui e cellulis latis efformata, cellulis externis quandoque longe conoideo prominentibus et usque 30 μ long.; ascis clavatis breviter pedicellatis octosporis, 45-50 \times 7-8; sporidiis e anguste ovoideis subfusoideis 1-septatis septo leniter constrictis, utrinque obtusis, 9-11 \times 3-4,5.

Hab. ad ramos emortuos *Beloperones oblongatae* (Acanthaceae), Peradeniya Ceylon, Asia.

41. *Nectria sphaeriophila* Theissen, Ann. Mycol. IX, 1911, p. 51, tab. 5492

V fig. 16, VII fig. 69. — Miniato-cinnabarina. Peritheciis stromate parco, late effuso junctis, aretissime congregatis, stratum compactum, continuum efformantibus, 120-170 μ diam., obsolete papillatis, minute verruculosi; ascis dilutissimis, tenuibus, modice pedicellatis, n. sp. 52-56 \times 6-7; sporidiis oblongis, hyalinis, leviter curvatis medio septatis, non constrictis, utrinque rotundatis, cellula inferiore saepe paullo latiore, 15-16 \times 3.

Hab. in ligno marcescenti parasitica ad stroma Sphaeriaceae (Fungi) cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK). — Differt a *N. episphaeria* modo crescendi fabrica et modis sporarum; a *N. punicea* peritheciis minoribus, non pulvinatim aggregatis, obscurioribus.

42. *Nectria sydowiana* Theissen, Ann. Mycol. IX, 1911, p. 48, tab. V 5493

fig. 11-12. — Peritheciis sparsis, bysso tenui albido orbiculariter determinato insidentibus, globosis v. doliiformibus, albido-fusculis, circ. $260 \times 220-240$, apice corona albida discoidea, plana, compactiuscula, ex hyphis hyalinis dense intricatis formata cineto, ostiolo pertusis; ascis cylindraceis $70-76 \times 8-10$ breviter pedicellatis; sporis distichis, flavidulis, fusoides, utrinque acutatis, rectis v. curvulis, ad septum medium non constrictis, $32-48 \times 4$.

Hab. ad ramos *Bambusa* e (Graminaceae), Sao Leopoldo, Rio Grande do Sul, Brasiliae (RICK). — Ob characteribus sporarum *Nec. abnormis* P. Henn. et *N. subfalcatae* P. Henn. proxima sed peritheciis diversa.

43. *Nectria tjibodensis* Penz. et Sacc. — Syll. XIV p. 636 — var. *Gli-* 5494

ricidia Rehm, Ascom. Philippin. VII, in Leaflet of Philippin. Bot. VIII, 1916, p. 2922. — A typo differt peritheciis e mycelio albidulo subcorticali late expanso caespitose erumpentibus, flave fusculis, fusce papillulatis.

Hab. ad *Gliciridium sepium* (Leguminosae), Los Baños, Ins. Philippin. (M. B. RAIMUNDO).

44. *Nectria muscicola* Sacc., Ann. Mycol. XI, 1913, p. 416. — Perithe- 5495

ciis sparsis, epiphyllis, perexiguis, $150-200 \mu$ diam., carnosulis, globulosis, superficialibus, rubris, non papillatis, praeter areolam circularem planam, glabram albo-pilosulis, ostiolo rotundo (inclusis periphysibus $18-20 \times 2-3$) $45-55 \mu$ diam.; contextu ex cellulis tenerimis parenchymaticis, parum distinctis formato; ascis cylindraceis, v. cylindraceo-clavatis, $70 \times 5,5-6,5$, octosporis, non v. indistincte paraphysatis, deorsum modice tenuatis; sporidiis monostichis v. apice distichis ellipsoideo oblongulis, utrinque rotundatis, tenniter 1-septatis, non vel vix constrictis, hyalinis, $8,5-9 \times 4,5-5$.

Hab. in foliis subvivi Muscorum (*Barbula* sp.), Mescia pr. Tripoli, Africa bor — Peritheciis pili tereti-subclavati, continui, hyalini, $40-50 \times 2,5-3,5$. A speciebus bryophilis facile distinguenda; videtur parasitica.

45. *Nectria Citri* P. Henn., Hedw. vol. 48. (1908) p. 104. — Maculis my- 5496

celli eretaceis vel isabellinis; hyphis septatis, ramosis, $3-5 \mu$ cr., hyalinis, conidiis falcatis, $40-80 \times 5-7$, 3-7-septatis, hyalinis (*Fusarium*); peritheciis gregariis, subglobosis, collabentibus, coccineis, squamulosis, $170-200 \mu$ diam.; ascis clavatis, obtusis, octosporis, $45-60 \times 7-11$; sporidiis oblique monostichis v. subdistichis, ellipsoideis, 2-guttulatis, 1-septatis, constrictiusculis, flavidulis, $11-14 \times 5-7$.

Hab. in corticibus *Citri Aurantium* (Rutaceae), hort. botan. Goeldi, Pará, Brasilia (BAKER).

46. *Nectria Bainii* Masee (1899) — Sacc. Syll. XVI p. 579. — Var. 5497
hypoleuca Sacc., Notae Mycol. XX, Nuovo Giorn. bot. it., N. S., 23., 1916, p. 205. — Subiculo late effuso albo v. albido, tomentoso, nunquam flavo v. aurantiaco; cetera vix diversa; perithecia rarius senio leviter collabentia; sporidia 11-12 \times 4,5, diu continua, dein 1-septata non constricta.

Hab. in fructibus junioribus, qui necantur *Theobromae Cacao* (Sterculiaceae), Los Baños, Ins. Philipp. — Socia adsunt *Mycogone cervina* v. *Theobromae* et *Fusarium Theobromae* App. et Strunk.

47. *Nectria huberiana* P. Henn., Hedw. vol. 48. (1908) p. 104. — Mycelio maculiformi, flavo-pallescente, subcretaceo; peritheciis gregaris, subglobosis, rubris, levibus, 180-240 μ diam., ascis cylindraceo-clavatis, obtuse rotundatis, octosporis, 50-80 \times 9-12; sporidiis oblique monostichis vel subdistichis, oblongo-ellipsoideis, utrinque obtusis, curvulis, granulatis, hyalinis, 1-septatis, 16-25 \times 6-8. 5498

Hab. in fructibus *Theobromae longiflorae* (Sterculiaceae), hort. bot. Goeldi, Pará, Brasiliae (HUBER). — Sporidiis majoribus obtusiusculis a *N. Bainii* Mass. et *N. camerunense* App. et Str. distincta sed eis similis et affinis.

IV. *Lepido-lasionectria*

48. *Nectria chrysolepis* Pat., Bull. Soc. Mycol. de Fr. 1913, p. 224. — 5499
 Superficiali, stromate nullo, solitaria v. gregaria sed caespitosa; peritheciis globosis 300 μ circ. diam., rubro-aurantiacis, verrucis subpyramidalis flavo-auratis tectis, dein aurantiacis, 60 μ circ. altis, e cellulis magnis 12-30 μ angulosis v. rotundatis efformatis, crasse tunicatis; contextu carnoso concolori grosse parenchymatico; ostiolo papilliformi; ascis octosporis, circ. 90 \times 8; sporidiis ovoideis, obtusis, septo non v. parum constrictis, biguttulatis, levibus, 12 \times 6.

Hab. in ligno denudato, Hanoi Tonkin Cina, Asia (DUPORT).

49. *Nectria albicans* Starb. — Syll. XVI p. 577 — Var. *microspora* 5500
 Theiss., Ann. Mycol. IX, 1911, p. 48. — A typo recedit sporidiis minoribus, 18-25 \times 6,5-7.

Hab. in cortice arboris ignoti, Rio Grande do Sul, Brasiliae.

50. *Nectria sulcispora* T. Peteh, Hypocr. zeyl. in Ann. R. Bot. Gard. 5501
 Peradeniya v. 7., P. II, 1920, p. 129 (Lasionectria). — Peritheciis sparsis, superficialibus, late conoideis, 0,2 mm. diam. 0,15 mm. altis non collabescentibus, ostiolo papillato et hyphis albis floccosis prae-

dito, obscure flavo-brunneis, parietibus pseudoparenchymaticis pallide brunneis ex cellulis parvis crasse tunicatis efformatis; ascis clavatis octosporis, $50-60 \times 10-12$; sporidiis oblique monostichis v. distichis, ovoideis, hyalinis 1 septatis non constrictis, oblique longitudinaliterque sulcatis, $10-13 \times 4-6$.

Hab. in *Xylaria* (Fungi), vetusta, Hakgala Ceylon, Asia.

NEOHENNINGSIA Koord. — Syll. XXII p. 474.

1. *Neohenningsia confluens* T. Petch, Hypocr. zeyl. in R. Bot. Gard. 5502 Peradeniya v. 7., P. II, 1920, p. 130 et 114. — Peritheciis circ. 0,35 mm. diam., primum rubro-brunneis subtranslucidis demum ochraceis et opacis extus pruinosis, hyphis conoideo-fasciculatis usque 100 μ long., sparsis praeditis, demum deciduis, parietibus in stratu externo parum conspicuo et cellulis parvis efformato externo cellulis interioribus; sporidiis $10-12 \times 5$, cenuiter tunicatis.

Hab. in ramis emortuis, Ceylon, Asia. — *N. suffultae* proxima, cum qua antea confusa.

NEONECTRIA Wollenweber, Ann. Mycol. 15., 1917, p. 52. — Peritheciis contextu et forma fere Nectriae (sect. ex gr. Willkommioles Wr., Phytopathology, 3., 1913, p. 226), singulis v. gregariis, laeto colore; sporidiis tenuibus Mycosphaerellae similibus ellipsoideis, 1-pluriseptatis; conidiis cylindraceis Ramulariam referentibus, chlamydo-sporis intercalariis.

1. *Neonectria Ramulariae* Wollenw., l. c. — Stat. conidioph. ? *Ramularia magnusiana* (Sacc.) Lind. = *Septocylindrium magnusianum* Sacc. parasiticum in foliis *Trientalis europaeae*. — Peritheciis solitariis v. in acervulos aggregatis, rubris, $200-300 \times 170-250$, ovoideis v. globosis; ascis 8-sporis; sporidiis coacervatis, ochroleucis, singulis hyalinis, tenuibus, typice ellipsoideis, 1-septatis, $12-15 \times 3,2-4$, rarius $11-20 \times 3-4,5$, in statu germinanti 1-3-septatis.

Hab. in tumoribus heteroblasticis ramentorum *Rubifrucosi* (Rosaceae), pr. Volkwinkel Rhénogoviae, Germania. — Nisi status conid. distinguat speciem, haec aegre distinguenda videtur. Typus *Ramulariae* est biophilus et foliicola ergo inepte ut specificum nomen *Neonectriae* seu *Nectriae* adhibitum. Aegre synonym. esse potest *Fusarium obtusiusculum* Sacc. (ut A. affirmat) saprophyticum in hibernaculis *Nelumbii* (P. A. Sacc. ms.).

SEPTOMAZZANTIA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 193 et

668. — Stroma cortice innatum superficie emergens. Peritheciis immersi parietibus brunnescentibus fibrillosis mollibus limitati. Asci aparaphysati octospori. Sporidia hyalodidyma. — Typus gen.:

1. *Septomazzantia epitypha* (Cooke) Theiss. et Syd. (= *Phyllachora* 5504 *epitypha* (Cooke) Sacc., Syll. II p. 605).
2. *Septomazzantia bicchiana* (De Not.) Theiss. et Syd. (= *Microcyclus* 5505 *bicchianus* (De Not.) Syd., Syll. XVII p. 845).

IJUHYA Starb. — Syll. XVI p. 581.

1. *Ijuhya vitrea* Starb. — Syll. XVI p. 581 — var. *javanica* v. Höhn., 5506 *Fragm. zur Mykol.* 762, in *Stzgsb. Akad. Wiss. Wien, CXXI*, 1, p. 380 (1912).

SPHAEROSTILBE Tul. — Syll. II p. 511, IV p. 972, XI p. 359, XVII p. 798, XXII p. 475.

1. *Sphaerostilbe flammeola* v. Höhnelt, *Fragm. z. Mykol.* XVII N. 877 5507 p. 2 (50), *Stzb. d. k. Ak. d. Wiss. Wien, Math.-naturw., Abt. I*, 124 Bd. — Strasser, *Verh. zool. bot. Ges.* 69., 1919, p. 358. — Peritheciis piriformibus pallide rubris, solitariis v. aggregatis, parietibus tenuibus praeditis, basi hyphis hyalinis donatis, ostiolo pilis hyalinis simplicibus unilocularibus ornato; paraphysibus nullis v. indistinctis; ascis clavatis sessilibus, 80-100 \times 14; sporidiis hyalinis bilocularibus plerumque ellipsoideis v. biconoideis, distincte contractis, loculo superiore majore, 20-30 \times 8-10.

Hab. in cortice exsiccata *Clematidis Vitalbae* (Ranunculaceae), Austria. — Status conidicus *Atractium flammeolum* v. Höhn. — Proxima *Sph. fuscae* Fuck. et *Sph. flammeae* Tul.

2. *Sphaerostilbe placenta* Theissen, *Ann. Mycol.* IX, 1911, p. 55, tab. 5508 V fig. 10, VI fig. 30. — Stilbum subulatum, fuliginenum, griseo-viridulo-pruinatum, 1-1,5 mm. longum; stromatibus pyrenophoris applanato-placentiformibus, vix 0,5 mm. crassis, ambitu irregulariter orbicularibus, 1-3 mm. diam., gyroso-colliculosis, griseo albidis, ostioliis luteo-brunneis punctatis, aetate fusciscentibus et grosse nigro-punctatis; intus griseis, intense rubescentibus quando madefiunt; peritheciis sphaeroideis, 250-280 μ diam. v. piriformibus 280-360 \times 220-280, immersis, ostiolo vix cupulato-emergenti; ascis rectocylindraceis, pedicello brevi firmo, supra rotundato-truncatis, p. sp. 72-80 \times 6-8; sporis monostichis, hyalinis medio septatis non contractis, ellipsoideis, utrinque rotundatis, episporio verrucoso, 10-13 \times 5-6; paraphysibus nullis.

Hab. in ligno corticato, Rio Grande do Sul, Brasiliæ. — Differt a *Sph. Henningsii* Ferd. et Wing. stromatibus valde applanatis, sporis verrucosis, stilbo subulato nec globoso-capitato et colore.

VALSONECTRIA Spegazz. — Syll. II p. 579, XIV p. 645, XXII p. 483.

1. *Valsonectria orbiculata* Syd., Ann. Mycol. 14., 1916, p. 86. — Stro- 5509
matibus amphigenis, in circulos omnino orbiculares 3-5 mm. latos dense concentriceque dispositis, minutis, globoso-conicis, 350-450 μ diam., basi saepe confluentibus, matricem elevantibus et tandem disrumpentibus, demum vertice parum prominulis, profunde immersis, mesophyllum occupantibus, contextu carnoso ex hyphis crassiuscule tunicatis crebre articulatis inferne hyalinis superne griseo-brunneolis composito; peritheciis paucis in quoque stromate, omnino immersis, 150-220 μ diam., ostioliis longiusculis et crassiusculis fulvo-rubris erumpentibus, pariete tenui sed distincto fibroso; ascis cylindraceo-clavatis, apophysatis, 50-70 \times 10-13, octosporis; sporidiis oblique monostichis usque distichis, oblongis, medio septatis, non constrictis, hyalinis, grosse 4 guttatis, 16-18 \times 5-6, utrinque obtusis, loculo supero saepe crassiore; pycnidiis simul praesentibus cum sporis fusoides rectis vel leniter curvatis utrinque attenuatis continuis hyalinis, 8-10 μ longis et 2,5-3 μ latis, sporophoris subulatis, 8-10 μ longis et 2-2,5 μ crassis suffultis.

Hab. in foliis vivis Myrsinaceae, Miliquabo Rio Cuquenán, Venezuela (E. ULE).

HYPOCREA Fr. — Syll. II p. 520, IX p. 972, XI p. 361, XIV p. 641, XVI p. 583, XVII p. 800, XXII p. 477.

1. *Hypocrea brunnea* T. Peteh, Hypocr. zeyl. in Ann. R. bot. Gard. 5510
Peradeniya v. 7., P. II, 1920, p. 132. — Stromatibus circularibus, irregulariter pulvinatis usque 1,2 mm. diam. et 0,6 mm. alt., pallide uniformiter rubro-brunneis, globosis non translucidis, ostioliis non apparentibus, elevationibus perithecialibus distinctis, intus albis, fragilibus; peritheciis globosis 0,2 mm. diam., parietibus hyalinis v. pallide flavescentibus; ascis 96 \times 5; segmentibus sporarum globosis 3,5-5 μ diam. v. cuboideis et 4 \times 3, spinulosus hyalinis, cirrhum album efformantibus.

Hab. in ligno emortuo, Hakgala Ceylon, Asia. — *Hyp. discellae* proxima sed ostioliis inconspicuis sporidiis majoribus etc. diversa.

2. *Hypocrea chlorostoma* T. Peteh, Hypocr. zeyl. in Ann. R. Bot. Gard. 5511
Peradeniya v. VII, P. II, 1920, p. 133. — Stromatibus discoideis

supra convexulis, aequalibus usque 4 mm. diam. et 0,5 mm. crassis, margine rotundatis, flavo-brunneis dein sordide brunneis ostioli obscure virentibus praeditis, intus albo-flavescentibus non transiueis, aridis rugosis obscure rubro-brunneis, ostioli non evidentibus, v. supra viridi-nigrescentibus infra rubro-brunneis, intus viridi-nigrescentibus; peritheciis globosis 0,1-0,15 mm. diam. v. ovoideis 0,18 mm. diam. 0,1 mm. altis; parietibus peritheciis vivis flavo-virentibus, in speciminibus siccis flavo-brunneis; ascis 8-16 sporis, 60-64 \times 4; sporidiis vivis pallide viridibus, vetustate viridi-nigricantibus, verrucosis, plerumque globosis, 3,5-4, nonnullis ovoideis 4 \times 3.

Hab. ad ligna emortua, Peradeniya Ceylon, Asia.

3. **Hypocrea extensa** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 132. — Stomatibus usque 1 cm. diam. v. irregulariter confluenso multo latoribus, planis tenuibus, 0,3 mm. circ. cr. pallide flavis, dense brunneo ostiolatis, globosis opacis aequalibus; margine definito non byssino arescendo incurvato, intus albis e flavo corticatis; peritheciis globosis usque 0,1 mm. diam. v. ampullaceis, confertis, parietibus flavis praeditis; ascis 8-16 sporis, parte sporifera 42-56 \times 3-4; segmentis sporarum globosis, hyalinis, minute verrucosis, 2,5-3 diam.

Hab. ad ramos emortuos, Peradeniya, Ceylon, Asia.

4. **Hypocrea fulviseda** Bresadola, Ann. Mycol. 18., 1920, p. 56. — Subiculum late effusum, obscure fulvum, ozonioideum, ex hyphis septatis, non nodosis, 5-8 μ crassis, compositum; stomatibus pezizoides, breviter stipitatis, extus intusque albis, disco applanato vel subconcavo, orbiculari, 1-2 mm. lato, inferne sensim attenuato; stipite cylindraco, in subiculo nidulante, albo, 1 mm. circiter longo, $\frac{1}{3}$ mm. crasso; peritheciis immersis, subdistantibus, parvis, subglobosis, 150-160 μ , ostioli conoideis vix prominulis et superficiem stromatis fulvello-punctatam efficientibus; contextu stromatis ex hyphis hyalinis, 3-4,5 μ crassis; ascis cylindracois, 70-90 \times 3-4; articulis sporidiorum truncato-quadrangulalibus, 4 \times 2, biguttulatis.

Hab. in cortice arbor. frond., S. Leopoldo, Brasiliae (RICK).

5. **Hypocrea gigantea** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII, P. II, 1920 p. 131. — Stomatibus irregulariter globosis v. ovoideis usque 4 cm. long. 3 cm. latis et 3 cm. altis, lateraliter plicatis et infra breviter contractis, saepe aggregatis, quandoque pulvinatis et infra depresso plicatis, centro insertis, colore coriario v. rubro-coriario, glabris, opacis; ostiolo pallide brun-

neis, inconspicuis non prominentibus; intus albis, radiatim fibrillosis, stratu exteriori e contextu mox separabili; peritheciis in zona periphaerica distincta confertis, verticaliter ovoideis usque 0,4 mm. altis et 0,25 mm. diam., parietibus hyalinis; ascis cylindraceis $70 \approx 4$, 8-16-sporis; segmentis sporarum globosis 3-4 μ diam. v. ovoideis et tunc $4-5 \approx 3-3,5$, hyalinis minute verrucosulis.

Hab. in Peradeniya, Henaratgoda, Waga, in ins. Ceylon, Asia.

6. *Hypocrea japonica* Yasuda Ats., Botan. Mag. Tokyo, 34., 1920, p. 5515 179, 3 fig. — Stroma centralis stipitiformis, supra pileiformi et irregulariter expansum carnosum centro depressum margine lobulatum, sicco 2,5-5 cm. altum, supra, 4,5-6 cm. latum, 0,5-1 cm. crassum; superficie inaequali undique ob peritheciolorum ostiola nigropunctata, intus brunneo; stipite farcto cylindraceo 1,5-2,5 longo 1-1,5 cm. lato, levi, brunnescenti; peritheciis prope superficiem dense aggregatis et stratum simplicem efformantibus, ovoideis, 0,4-0,5 mm. long. 0,28-0,35 mm. latis; ascis cylindraceis infra angustatis apice rotundatis octosporis, 150-200 $\approx 7-8$; sporis monosticis, fusoides, utrinque acutatis, bilocularibus hyalinis, levibus, 28-35 $\approx 6-7$; paraphysibus nullis.

Hab. ad terram pluribus locis, Japoniae. — Fungus comestibilis et vulgo *ibuki-take* vocato.

7. *Hypocrea Petchii* Trotter n. n., *Hyp. mellea* T. Petch, Hypocr. zeyl. 5516 in Ann. R. Bot. Gard. Peradeniya, v. VII, P. II, 1920, p. 133, nec Rehm. — Stromatibus subtranslucidis, pallide flavo-brunneis v. melleis et juventute brunneo ostiolatis, arescendo rubro-brunneis et ostiolis nigricantibus praeditis, pulvinatis usque 4 mm. diam., margine rotundatis, basi in parte centrali latiuscula insertis; superficie aequali, arescendo rugosa, juventute intus pallide flavis et cariosis, arescendo albo-flavescentibus et suberosis v. quandoque fragilibus; peritheciis plerumque verticaliter ovoideis usque 0,3 mm. alt. 0,1-0,15 mm. diam., quandoque globosis, 0,2 mm. diam., varia profunditate sitis, parietibus perithecialibus flavo-brunneis; ascis 65-75 ≈ 4 ; segmentis sporidiorum ovoideis 5-6 ≈ 4 , v. globosis et 4-5 μ diam., spinulosis, flavis v. flavo-virentibus, massa sporidiorum exeunte flava.

Hab. Hakgala, Ceylon, Asia.

8. *Hypocrea mellea* Rehm, Ascomyc. Philipp. VI, Leaflets of Philipp. 5517 Botany, VI (1914) p. 2276. — Stromatibus sparsis, sessilibus, disciformi-orbicularibus, ad basim valde constrictis, 3-4 mm. latis, 1-1,5 altis, vix convexulis, margine tenuissimo levi cinctis, melleis, intus

albis; peritheciis monostiche innatis, globulosis, 150 μ latis, ostioliis punctiformibus vix conspicuis; ascis cylindraceis, aparaphysatis, 60-70 \times 4; sporidiis monostichis, didymis, loculo superiore globoso, inferiore obtuse conoideo, mox secedentibus, hyalinis (mensura desunt).

Hab. in ramis deciduis decorticatis, Mt. Maquiling, prope Los Baños, ins. Philipp. (C. F. BAKER).

9. *Hypocrea ambigua* Theissen, Ann. Mycol. IX, 1911, p. 58, tab. VI 5518
fig. 62. — Stromatibus sparse gregariis e subiculo albo tenuissimo, orbiculari oriundis, hemisphaericis 0,5 mm. diam., annulo albo subiculi diu cinetis, fusciscentibus, ostioliis rubro-brunneis hemisphaericis prominulis; peritheciis immersis, subglobosis 132-170 μ diam.; ascis cylindraceis, supra rotundatis, brevissime pedicellatis, p. sp. 54 \times 4; sporis viridulis, minutis, ellipsoideis, episorio minute verrucoso, medio vix constrictis, articulis hemisphaericis non secedentibus, 5,5 \times 3,5.

Hab. in ramis corticatis, Rio Grande do Sul, Brasiliae. — Exterius *H. Rickii* similina; differt subiculo plano stromatibus minoribus, peritheciis immersis, ostioliis vere prominulis, praecipue sporis.

10. *Hypocrea Rickii* Theissen, Ann. Mycol. IX, 1911, p. 58, tab. VII 5519
fig. 72. — Stromatibus pulvinatis, applanatis hemisphaericis, 0,5-1 mm. diam. e bysso albo-pulvinato oriundis, ex albo floccosis ochroleucis, dein fusciscentibus, superficie ob perithecia sublibera mammoso-asperis, ostioliis non prominulis fusco-brunneo-punctatis; peritheciis ovoideis, 190-250 \times 135-215, parietibus sat crassis (14-20) v. etiam piriformibus v. pressione mutua irregularibus; ascis elongatis cylindraceis, supra rotundatis, pedicello perbrevis, p. sp. 75-80 \times 5,5; sporis hyalinis 9-10 \times 4-5, cellula superiore rotundata, inferiori subrectangulari.

Hab. in ligno corticato, Rio Grande do Sul, Brasiliae.

11. *Hypocrea degenerans* Syd., Enum. Philipp. Fungi I, in Philipp. 5520
Journ. of Sci. VIII (1913) p. 274. — Stromatibus sparsis vel aggregatis primitus immersis dein erumpenti-superficialibus, discoideo-pulvinatis, rotundatis, semper convexis, matrici omnino lateque adnatis, 1-2 mm. diam., extus atro-brunneis vel atris, intus vivide flavo-virentibus, ostioliis perithecorum non vel vix punctatis; peritheciis distichis, usque tristichis, globoso-conicis; ascis lineari-cylindraceis, p. sp. 60-85 \times 4,5-6, octosporis; sporidiis biglobosis, hyalinis, levibus, intra ascos jam secedentibus, articulis 4-4,5 μ diam.

Hab. in cortice emortuo, Indochina, Annam, Nha-trang (C. B.

ROBINSON). — A caeteris speciebus differt stromate initio immerso et tunc habitu fere *Diatrypes*.

12. *Hypocrea gyrosa* Theissen, Ann. Mycol. IX, 1911, p. 59, tab. VI, 5521

fig. 53. — Stromatibus sessilibus, lata basi insidentibus v. infra coarctatis centraliterque affixis, 1-4 mm. diam. 0,8-1,3 mm. altis, margine rotundato-recurvatis, flavidulis, superficie giroso-plicata et mammilloso-undulata, ostiolis nigris punctiformibus, dense stipatis pictis, disco convexo, medio umbilicato; peritheciis stipatis, applanato-globosis, 155 × 190 v. ellipsoideis, 170-240 × 160-185, abrupte in collum longiusculum 85-100 μ longum coarctatis; ascis 125-155 × 5-5,5, cylindraceis; sporis 10,5 × 3-3,3, cellulis subaequalibus.

Hab. in ligno decorticato, Rio Grande do Sul, Brasiliae. — *H. intermediae* affinis, differt tamen ostiolis distinctissimis nigris, disco plicato convexo, stromate sessili non turbinatim stipatis praecipue sporis.

13. *Hypocrea intermedia* Theissen, Ann. Mycol. IX, 1911, p. 61, tab. 5522

V fig. 27, VI fig. 51, VII fig. 67. — Stromatibus turbinatis, hypothallo tenuissimo, determinato, 2 mm. lato insidentibus, applanatis, $\frac{3}{4}$ -1, $\frac{1}{4}$ mm. altis, 2-4 mm. latis, primitus flavis, dein ferrugineis, brunnescentibus; discus concavus, medio umbilicatus, leniter mammillosus, in sicco rugosus, luteo-stramineus, ostiolis luteo-brunneolis, delicatissimis, vix sub lente visibilibus punctatus, subtus angustatus in basin sterilem stipitiformem cylindricam v. potius doliiformem; contextus albidus, e cellulis polygonalibus, majusculis, circ. 16 μ diam. compositus; stratum pseudo-epidermale circ. 30 μ cr., e cellulis angustioribus (hyphis densius intricatis et brevius articulatis) formatum, rubescens; peritheciis immersis, botuliformibus (collo circ. 65 μ longo, ipsa perithecii cavitas elliptica, 150-190 × 110-140) haud stipatis; ascis breviter pedicellatis, anguste cylindraceis, p. sp. 59-64 × 3,5-4, pedicello fere filiformi, 10-16 μ longo; sporis viridulis, minutissime asperulis, 8 × 2,7-3,3, cellula superiori rotundata, inferiori paullo elongata.

Hab. in ligno decorticato, Sao Leopoldo, Rio Grande do Sul, Brasiliae (RICK). — Differt ab *H. umbilicata* P. Henn. stromatibus multo minoribus sporisque verrucosis. *H. turbinata* Starb. simillina est, differt tamen fabrica disci sporisque obscure olivaceis et glabris.

14. *Hypocrea borneensis* H. S. Yates, F. from Brit. N. Borneo, in Phil. 5523

lipp. Journ. of Sc. Bot. v. 13., 1918, p. 237. — Stromatibus gregaris, sessilibus, convexo-pulvinatis, 3-6 mm. diam., extus brunneis, intus pallide brunneis; peritheciis globosis, immersis, ostiolis

punctiformibus, brevibus; ascis cylindraceis, aparaphysatis, 70-80 μ 5-6, 8-sporis (simulate 16-sporis); sporidiis monostichis e cellulis 2 aequalibus compositis mox secedentibus, cellulis singulis globosis, hyalinis, 4-5 μ diametro.

Hab. ad truncum emortuum *Heveae brasiliensis* (Euphorbiaceae), Membakut in ins. Borneo bor.

15. *Hypocrea subiculata* Theissen, Ann. Mycol. IX, 1911, p. 56, tab. 5524

V fig. 22-23, VII fig. 68. — Subiculum albidoflavidum, late effusum, tenuissimum, ex hyphis hyalinis 6-8 μ cr. unilateraliter nodulosum, densiuscule intricatis compositum, in quo nilulant placentae stromaticae, pulvinato-applanatae, ambitu irregulari plus minusve orbiculari, c. 350-500 μ diam., tennes, peritheciis immersis vix vertice subemergentibus leniter mamillosae, primitus flavidulae, ostioliis peritheciarum cinnamomeis pictae, dein magis magisque tota superficie cinnamomeae; perithecia singula 150-170 μ diam. pauca in quoque stromate (9-20), sphaeroidea; asci cylindracei breviter pedicellati, p. sp. 80-92 μ 4,5-5; spores hyalinae medio vix constrictae, 10 μ 4, in articulos fere aequales secedentes.

Hab. in *Poria* sp. (Fungi), Sao Leopoldo, Rio Grande do Sul, Brasiliae (RICK).

16. *Hypocrea ibicuyensis* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5525

Buenos Aires XXIII (1912) p. 75. — Stromatibus sparsis vel hinc inde 2-3 gregariis, discoideis vel discoideo-repandulis, 2-10 mm. diam., inferne matrii latiuscule adfixis, planis, superne convexulis, atrolivaceis, ostioli papilliformibus vix obscurioribus laxe exasperatis, intus carnosoceraceis albis; oculis globosis 100 μ diam., omnino infossis; ascis cylindraceis, constipatis, 90 μ 5, aparaphysatis; sporidiis recte monostichis, bicellularibus, levibus, articulis globosis, 4 μ diam. mox secedentibus.

Hab. ad truncos excaesos decorticatos *Erythrinae cristagalli* (Leguminosae), in silvulis uliginosis prope Ibicuy, Entre Rios, Argentina.

17. *Hypocrea corticioides* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5526

Buenos Aires XXIII (1912) p. 75. — Stromatibus latissime effusis, 1-10 cm. diam., tenuibus, 0,5 cr., ligno denudato vel cortice relaxato tecto insidentibus, laxissime adnatis et facillime secedentibus, repando-diformibus, extus ochroleucis vel pallide fulvis, intus compactiusculis, carnosoceraceis, albis; peritheciis copiosis, omnino immersis, globulosis, 130-140 μ diam., ostiolo vix papillato, leviter infusato, minutissime tantum manifestis, membranaceis, fulvellis,

udis cupulato-collapsis; ascis cylindraceis, breviter pedicellatis, 55-60 \times 4, aparaphysatis; sporidiis recte monostichiis, hyalinis, bicellularibus, articulis globosis, 3-3,25 μ diam., mox secedentibus.

Hab. ad truncos excaesos emortuos *Erythrinae cristagalli* (Leguminosae), in silvulis uliginosis prope Ibicuy. Entre Rios, Argentina.

DIALHYPOCREA Spegaz., Rel. mycol. trop. etc., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 113. — Perithecia superficialia caespitosa, stromate parcissimo basi juncta ut in *Eunectriis* plurimis; asci lineares aparaphysati octospori; sporae hyalinae didymae, articulis subglobosis mox secedentibus. — Stroma et perithecia *Eunectriæ* sporidia vero *Hypocreæ*.

1. **Dialhypocrea puiggariana** Spegaz., l. c. cum icon. — Stromatibus numerosis discretis pusillis (250-500 μ) sessilibus glaberrimis flavidulomelleis, 1-6-perithecieris; peritheciis globosis fere liberis vix basi stromati insititiis et inter se breviter confluentibus, non v. vix papillulato ostiolatis, carnosulis, levibus opacis, 120-150 μ cr.; ascis angustis apice rotundatis, basi breviter attenuato-pedicellatis, octosporis, 80 \times 5-6; sporidiis rectis monostichis parvis 7-8 μ long., levibus, loculis aequaliter cuboideo-subglobosis, 4-5 \times 3-4 crassis.

Hab. ad ramos denudatos putres, in silvis Apiaby, Brasilia (J. PUIGGARI).

CLINTONIELLA Sacc. — Syll. II p. 532, XIV p. 645, XVI p. 588, XXII p. 480.

1. **Clintoniella incarnata** (Pat. et Har.) Sacc. et Trott. — Syll. XXII p. 552, 480 — Notae Mycol. XXII p. 190 (R. Acc. Pad. 1917).

Hab. (adde) in fragmentis corticalibus dejectis indet. Filfil, Erythraea, Africa trop. — Pulchellâ, exigua species. Asci cylindracei, 60-65 \times 5,5-6, octospori; sporidia oblique monosticha, 8 \times 4,7, hyalina, immatura diblasta, probabiliter matura 1-septata; ostiola punctiformia, videntur atro-sanguinea.

PODOCREA Sacc. — Syll. II p. 530, XIV p. 645, XVI p. 587, XVII p. 799, XXII p. 480.

1. **Podocrea zeylanica** Petch, Ann. R. Bot. Gard. Peradeniya v. VI, P. III, 1917, p. 230. — Stromatibus fasciculatis, simplicibus, clavatis vel cylindraceis, interdum compressis, supra saepe lobatis, ad 3 cm. alt., 4 mm. diam., rufis vel pallide brunneis, ostiolis sa-

turationibus, basi pallescentibus, glabris; peritheciis confertis, ad 0,25 mm. diam.; ascis 60-80 × 3-4, cylindraceis, octo-dein sexdecim-sporis; sporis viridi-hyalinis, globosis, 3-4 diam., vel ovoideis, 3-5 × 2-5, leniter verrucosis.

Hab. ad ramos dejectos, Peradeniya, Ceylon, Asia.

HYPOCREOPSIS Karst. — Syll. IX p. 980, XVI p. 590.

1. **Hypocreopsis Phyllostachydis** (Syd.) Miyake et Hara, Stud. ub. Pilze 5530 d. Bamb. in Jap., in litt. VI, 1912. — *Ustilaginoides Phyllostachydis* Syd. — Syll. XVI p. 382. — Peritheciis stromate immersis, subglobosis, 170-200 × 150-170, subhyalinis; ostioliis papillatis emergentibus; ascis 8-sporis cylindraceis v. clavatis, 60-80 × 4-5; sporidiis ellipsoideis v. fusoides, 1-septatis, non v. vix constrictis, 6-9 × 3-4, hyalinis, localis non v. 1-guttulatis

Hab. in culmis *Phyllostachydis* (Graminaceae), Komba Tohyo (SHIRAI, MIYAKE). — Specimina a cl. Sydow observata v. tusta, obsoleta, hinc error de genere. Stroma verruciforme 5-9 mm long., 4-5 mm. diam., subroseum ostioliis punctatum.

HYPOMYCES Fr. — Syll. II p. 466, IX p. 954, XI p. 356, XIV p. 641, XVI p. 582, XVII p. 803, XXII p. 480.

1. **Hypomyces pallidus** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5531 Peradeniya v. VII, P. II, 1920, p. 134. — Mycelio albo compacto effuso; conidiophoris verticillatis usque 150 μ long. infra 4 μ cr., septatis; conidiis non visis; peritheciis immersis ostioliis prominentibus praeditis, quandoque superficialibus, hyalinis globosis v. ovoideis, usque 0,4 mm. altis, 0,2 mm. diam., ostiolo papilliformi praeditis; ascis cylindraceis octosporis, 100-110 × 6; sporidiis plus minus oblique monostichis, anguste ovoideis, inaequilateris, v. fusoides, hyalinis, cohacervatis albis, uniseptatis, non v. leniter constrictis; minute spinulosis, utrinque obtusis, 9-13 × 3-4.

Hab. in pileo *Agaricacearum* (Fungi), Deviturai, Ceylon, Asia.

2. **Hypomyces sulphureus** H. et P. Sydow, Ann. Mycol. XII, 1914, 5532 p. 564. — Stromate tenui membranaceo, continuo, intense sulphureo, effuso, ex hyphis laxis hyalinis 3-4 μ crassis formato; peritheciis immersis, dense sparsis, ovato-globulosis, vel succineo-flavis vel succineis, 250-300 μ diam., ostiolo obtuse conico; ascis cylindraceis, 75-95 × 6, octosporis, aparaphysatis; sporidiis monostichis vel oblique monostichis, fusoides, utrinque leniter atte-

nuatis et apiculo minutissimo saepe vix visibili auctis, medio constrictis, primitus non deinde modice septatis, hyalinis, distincte verrucosis, $15-70 \times 4-5$.

Hab. parasiticus ad *Hirneolam* affinem (Fungi), Mt. Maquiling prov. Laguna, Luzon, Ins. Philippin. (P. W. GRAFF).

3. *Hypomyces flavo-lanatus* Petch, Ann. R. Bot. Gard. Peradeniya v. 5533 VI P. III, 1917, p. 229. — Subiculo albo, tenui; peritheciis confertis, aurantiacis, globosis, $150-200 \mu$ diam., hyphis flavis radiantibus vestitis, ostiolo papillato fusco-rubro; ascis octosporis, ad 70×4 ; sporis monostichis viridi-hyalinis, ovoideis, interdum attenuatis, uniseptatis, leniter constrictis, obtusis, minutissime verrucosis, $6-8 \times 2,5-3$; statu conidiophoro stilboideo, ad 1,2 mm. alt.; stipite aurantiaco, basi 40μ diam., sursum attenuato, laxo; capitulo globoso, ad 100μ diam.; conidiophoris penicillioideis; conidiis subglobosis hyalinis, $2,5 \mu$ diam.

Hab. in *Poria* sp. (Fungi), Peradeniya, Ceylon, Asia.

4. *Hypomyces Rubi* (Osterw.) Wollenw. in Phytopathology III p. 211 5534 et 224 (1913), tab. XXII fig. 14-16, *Nectria Rubi* Osterwalder, Ber. deutsch. bot. Ges. XXIX Bd., 1911, p. 620, tab. XXII. — Peritheciis primum flavo-virentibus, dein rubris, limoniformibus ostiolo papillato praeditis, 500μ alt., $430-460 \mu$ cr.; ascis cylindraceo-clavatis $106-119 \mu$ long., aparaphysatis v. vix paraphysatis; sporis bilocularibus, utrinque rotundatis in quoque loculo 2-3-guttulatis, monostichis v. supra distichis, $15,9-18,6 \times 4,6-5,2$. Statu conidico (*Fusarium*, an potius *Ramularia*?): conidiis cylindraceo curvulis utrinque ellipsoideo rotundatis, continuis v. 3-5 septatis et tunc $53,2-61,2 \times 6,6-7,9$; conidiophoris dichotome v. trichotome ramosis; sporodochiis violaceis.

Hab. in radicibus languentibus *Rubi* idaei « Baumforths Säm-ling » culti, Wädenswil, Helvetia.

5. *Hypomyces Ipomoeae* (Halst.) Wollenw. in Phytopathology III p. 5535 34 (1913) Fig. D. — Ita vocanda est *Nectria Ipomoeae* Halsted, Syll. XI p. 357. — Peritheciis ovoideis rugosis rubris $225-375 \times 175-300$; sporidiis uniseptatis $10-13 \times 4,5-6$. Status conidicus fusarioidens (sect. Martiellae), conidiis apice magis acutatis basi magis pedicellatis, tunc 5-septatis, $45-70 \times 4,25-5,5$, tunc 3-5 septatis, $30-70 \times 3,75-5,5$; hyphis unicellularibus $6-12 \times 3-4,75$. Chlamydosporis $7-10 \mu$ (ex WOLLENWEBER).

mycetis, sed sporae valde inaequaliter septatae. — Typus generis *Apiocrea chrysoasperma* (Tul.) Syd. = *Hypomyces*.

NECTRIOPSIS R. Maire, Ann. Mycol. IX, 1911, p. 323. — Onfr. *Hyphe-* 5537
nectria p. 662. — Perithecia in subiculo byssino insidentia; asci ap-
raphysati, ascosporae utrinque rotundatae v. subacutatae nec api-
culatae, uniseptatae, monostichae. — Est *Byssonectria* Karst. sporis
bilocularibus; inter *Hypomyces* et *Nectria* medium, a primo differt
sporibus rotundatis v. subacutis nec apiculatis, ab altero stromate bys-
soideo et habitat.

Huc spectant *Byssonectria violacea* (Fr.) Seav., *Hypomyces aureo-*
nitens Tul., *Hyp. candicans* Plowr., *Hyp. berkeleyanus* Plowr.

LISEA Sacc. — Syll. II p. 517, XI p. 360, XIV p. 640, XVI p. 581,
XVII p. 806.

1. *Lisea revocans* Sacc., Notae Mycol. XX, Nuovo Giorn. bot. it. N. 5538
S, 23., 1916, p. 205. — Peritheciis hinc inde dense et saepius lon-
gitudinaliter congregatis, globoso-conoideis, rugulosis, 200 μ alt.,
170 μ cr., contextu dense et minute celluloso atro-olivaceo v. atro-
rufescente, cellulis 10-12 μ diam., ostiolo rotundo 20 μ diam., pe-
riphysibus angustissimis subhyalinis praedito; ascis octosporis fu-
siformibus, utrinque acutulis, 55-60 \times 11-12; paraphysibus delique-
scentibus; sporidiis distichis fusioideis, interdum curvulis, 18-23 \times
4,5-5, e hyalino dilutissime olivaceis.

Hab. in foliis emortuis *Imperatae cylindricae* (Grami-
naceae), Los Baños, Ins. Philipp. — Est e typico grege *Gibberellae*,
sed didymospora.

2. *Lisea ? pulicaris* Speg., Anal. Mus. Nac. Buenos Aires XXVI p. 127 5539
(1914). — Peritheciis superficialibus, sparsis vel gregariis, subse-
ratis, minutis, globosis, 150-180 μ diam., glabris, non collabescen-
tibus, ostiolo minuto impresso pertusis, contextu grosse parenchy-
matico-celluloso, amoene caeruleo; ascis subclavulatis, basi modice
attenuato pedicellatis, 80-100 \times 12-14, aparaphysatis sed mucro sub-
filamentoso obvallatis; sporidiis oblique distichis, ellipsoideis, utrin-
que acutiuscule rotundatis, medio septato-constrictis, 15-20 \times 7-9,
loculis aequalibus saepius grosse 1-guttulatis.

Hab. in culmis dejectis putrescentibus *Penicillariae ty-*
phoidis (Graminaceae), in sepibus prope Daccar, Senegal — An
Gibberellae pulicaris (Fr.) Sacc. forma didymospora?

3. *Lisea Spatholobi* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of 5540

Sci. VIII (1913) p. 395. — Peritheciis in maculis hypophyllis plus minusve circularibus, 1-2,5 cm. latis, dilute flavescentibus gregarie sessilibus, globoso-conoideis, haud papillulatis, poro pertusis, fuscis, 150 μ diam., excipulo crasso, parenchymatice contexto, cellulis facilliter dissolutis, extus obscure fusco, interius coerulescente, versus basim verrucoso cellulis conoideo-prominentibus; ascis fusiformibus, octosporis, apapophysatis, 30 \times 8-10; sporidiis distichis, oblongis, utrinque obtusis, rectis vel subcurvatis, continuis, biguttatis, dein medio septatis, non constrictis, utrinque biguttatis, hyalinis, 10-12 \times 3-4.

Hab. in foliis *Spatholobi gyrocarpi* (Leguminosae), Luzon, Prov. Laguna, Mt. Maquiling, Ins. Philipp. (E. B. COPELAND). — Subiculum nullum praesens.

4. *Lisea Tonduzi* Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. 5541
Cordoba, t. 23., 1919, Extr. p. 202, cum icon. — Perithecia superficialia, solitaria v. paucigregaria (2-3), 150-180 μ diam., uda globulosa, sicca corrugato-collabescentia, atro-coerulea, glaberrima, contextu grosse parenchymatico amoene intenseque caeruleo; asci subcylindraceuti, mox diffuentes, 8 spori, apapophysati ?, 75-80 \times 15-16; sporae distichae elliptico-subobovatae, medio 1-septatae non constrictae, laeves hyalinae, 18-20 \times 8.

Hab. communis in fructibus immaturis dejectis *Coffeae* sp. (Rubiaceae), in agris prope Tuis, Costarica, America trop.

Sect. 5. Phaeodidymae

LETENDRAEA Sacc. — Syll. II p. 538, XIV p. 646, XXII p. 484.

1. *Letendreaa rickiana* Rehm, Ascom. Exsicc. fasc. 55 n. 2114, Ann. 5542
Mycol. XII, 1914, p. 173. — Peritheciis dispersis, sessilibus conoideis, minutissime papillatis, glabris, fusco-luteis, parenchymatice ex cellulis perparvulis contextis, 150 μ latis; ascis cylindraceuti-clavatis, apice rotundatis, stipitatis, 70-75 \times 8-10, octosporis; sporis oblongo-ellipsoideis, medio, rarissime, infra medium septatis ibique paullulum constrictis, utraque cellula primitus 1-guttata, hyalinis, dein fuscis, 8-10 \times 4-5, monostichis, paraphysibus filiformibus ternerrimis.

Hab. truncos putridos *Fagi* (Fagaceae), Sonntagberg, Austria inf. (STRASSER). — *L. eurotioides* Sacc. et *L. luteolae* E. et Ev. proxima sed fabbrica peritheciolorum distincta.

Sect. 6. Hyalophragmiae

ORCADIA Sutherland, Trans. Brit. Myc. Soc. V, pt. I, 1914, p. 151 (1915). — Stroma nullum. Perithecia simplicia, immersa, contextu distincte molli pallidoque, numquam carbonaceo, ostiolo elongato fastigato praedita. Asci cylindranei vel clavati, octospori, paraphysati. Sporidia hyalina, transverse 2 pluri-septata. — Genus *Oesatiellae* forte affine, sed ostiolo elongato recedit.

1. *Orcadia Ascophylli* Sutherl., loc. cit., tab. 3 fig. III. — Mycelio hyalino; peritheciis thallo omnino immersis, globosis vel arcuatis, mollibus, pallidis, 160-200 μ diam., ostiolo elongato, lato, cylindraneo, 80-125 \times 35 superficiem attingente sed non protrudente; ascis clavatis, octosporis, 65-75 \times 17,5-18; paraphysibus numerosis; paraphysibus paucis, filiformibus, simplicibus, sporidiis cylindraneis, parum curvatis, 3-septatis, flavescentibus. 5543

Hab. in thallo vivo *Ascophylli nodosi* (Algae), Orkney, Scotia.

2. *Orcadia pelvetiana* Sutherl., New Phytologist, v. XIV, 1915, p. 183, fig. 1. — Mycelium in quibusdam locis, hyalinum; stroma nullum; perithecia simplicia, 110-140 μ diam., globosa, molli, pallida, thallo omnino immersa, ostiolo longissimo, 160-180 μ longo, 20-30 μ lato, cylindraneo vel fastigato, ad superficiem pertinente; ascis clavatis vel fusiformibus curvatisve, 50-65 \times 11-13, octosporis; paraphyses deliquescentes; sporidia fusiformia, curvata, circa 40 \times 4-5, 3-septata, primo hyalina demum flavescentia. 5544

Hab. in thallo vivo *Pelvetiae canaliculatae* (Algae), Orkney and Clare Island, Britannia.

BIONECTRIA Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 201. — Biophila; stromata subcarnosula pallidula matrici innata parum manifesta; perithecia carnosula laeticoloria, plus minusve superficialia, constipata sed discreta basi stromate communi confluentia; asci octospori; sporae hyalodidymae. — Est *Nectria* in partibus viventibus plantarum vigens.

1. *Bionectria Tonduzi* Spegaz., l. c. cum icon. — Perithecia dense regaria, stromate parco matrici innato-insidentia, primo suberumpentia, serius omnino superficialia 100-150 μ diam. carnosoceracea glabra sed squarroso-rimulosa, carneo-ochroleuca, ostiolo umbona-

tulo fuscесcente coronata, in sicco corrugata v. subcupulato-collabescentia, contextu indistincto; asci fusoides utrinque sensim attenuati apice rotundati, postice cuneati ac pedicello brevi crassoque suffulti, paraphysati v. paucissime mucose pseudoparaphysati 70-80 \times 15; sporae distichae ellipticae non v. lenissime subclavulatae, medio 1-septatae non constrictae, rectae, laeves, hyalinae, 25 \times 10.

Hab. in ramis et foliis vivis *Buettneriae carthagenensis* (Sterculiaceae), prope S. José, Costarica, America trop.

CALONECTRIA De Not. — Syll. II p. 540, IX p. 982, XI p. 363, XIV p. 647, XVI p. 593 et 1141, XVII p. 809, XXII p. 487.

1. *Calonectria Gymnosporangii* Jaap, Ann. Mycol. 15., 1917, p. 10. — Peri- 5546
theciis in Gymnosporangio parasiticis, in acervulos verruciformes 1,5-3 mm. latos collectis, atro-rubris, glabris, globosis, 250-350 μ lat. ostiolo papilliformi, aetate collabescentibus; ascis tereti-clavatis, apice rotundatis, 150 \times 8-10, octosporis; sporidiis oblongo-fusoides, rotundatis, 4-cellularibus; rarius 2-cellularibus, 15-30 \times 7-10, saepe guttulatis, hyalinis; paraphysibus non visis.

Hab supra *Gymnosporangium confusum* (Fungi) ad ramos *Juniperi phoeniceae* et *J. Oxycedri* (Coniferae) in consortio *Fusarii Gymnosporangii* quod est verisimiliter status conidiophorus, in peninsula Lapad pr. Ragusan, Dalmatia.

2. *Calonectria limpida* Syd., Leaflets of Philipp. Bot. V (1912) p. 1545. — 5547
Peritheciis dense gregariis, in mycelio *Meliolae* parasitantibus, coniciis, 70-110 μ altis, 50-80 μ latis, flavo-melleis, vel virescenti-flavis, in mycelio tenuissimo albido ex hyphis dense intertextis, hyalinis, ramosis, remote septatis, 2-3 μ cr. composito, superficialibus, circa apicem pilis brevissimis hyalinis vel subhyalinis, obtusis, 3,5-5 μ crassis obtectis, ostiolo prominulo, contextu e cellulis minutis imbricatis superpositis composito, hinc inde superficie lenissime asperulis; ascis fasciculatis, fusideo-clavatis vel clavatis, apice saepe attenuatis, sessilibus vel brevissime stipitatis, 32-42 \times 6-10, octosporis; sporidiis fusoides, utrinque obtusis, primo medio 1-septatis, dein 3-septatis, haud constrictis, hyalinis, 14-17 \times 2-3.

Hab. parasitica in mycelio vetusto *Meliolae* (Fungi) ad folia *Acalyphae stipulaceae* (Euphorbiaceae), Brooks Point, Palawan, ins. Philipp. — Habitus *Ophionectriae* sed sporidiis *Calonectriae*.

3. *Calonectria coralloides* A. Maublanc, Bol. Agric. Sao Paulo 1915, p. 5548
315-316 et tab. VI fig. 5-8; Bull. Soc. Mycol. de Fr., XXXVI, 1920,

p. 37, tab. III fig. 5-8.— Peritheciis minutis (100-150 μ diam.), sparsis, globosis, poro apicale vix conspicuo, albidis, in mycelio tenue, arachnoideo, ramoso, hyalino sessilibus, pilis numerosis praecipue ad apicem ornatis; pilis hyalinis, rigidis, brevibus, 20-30 μ altis, 5-8 crassis, apice irregulariter dichotome ramosis, crasse tunicatis; ascis cylindricis v. fuscoideis, brevissime pedicellatis, tunica crassa praeditis, apice rotundatis, 50-75 \times 14-16, 8-sporis, paraphysibus filiformibus; sporidiis distichis, clavatis, demum tenuiter 3-septatis, guttulatis granulosisve, non vel vix medio constrictulis, hyalinis, 15-20 \times 5-8; apice primum rotundatis, demum (an germinantibus?) attenuatis et fere appendiculatis, ad basim attenuatis, demum appendiculo obtuso recurvoque ornatis.

Hab. in foliis *Clidemiae hirtae* G. Don (Melastomataceae), supra mycelium *Meliolae Melastomacearum* Speg. (Fungi), socio *Trichothyrio fimbriato*, Rio de Janeiro, Brasiliae.

4. *Calonectria graminicola* F. L. Stevens, Bot. Gazette, 65., 1918, p. 5549 232.— Mycelium congregatum submembranaceum. Peritheciis e parvis numerosis, rubridis arescendo pallidis, globosis, 200-225 μ diam., cellulis irregularibus 10-18 μ diam.; setulis perithecialibus subcopiosis non septatis e apice obtuse regulariter subconoideis, basi non bulbosis, 75 μ long. basi 15 μ cr.; ascis numerosis 8-sporis cylindraceutis 75 \times 7-8; paraphysibus copiosis filiformibus; sporidiis maturis 3-septatis, e hyalinis pallide stramineis, rectis, curvis v. sigmoideis, utrinque acutis, 30-36 \times 5.

Hab. parasitica in *Meliola Panici* (Fungi), in *Lasiacis compacta* et *L. divaricata* (Graminaceae) et *Mel. Andirae* in *Andira jamaicensis* (Leguminosae), in Porto Rico.

5. *Calonectria epimyces* (Syd.) P. A. Sacc.— *Hyalocrea* (n. gen.) *epimyces* 5550 Syd., Ann. Myc. 15., 1917, p. 214.— Perithecia plura aggregata, mycelio mucedineo byssino hyalino ex hyphis repentibus tenuibus 2-2,5 μ crassis vix vel remote septatis ramulosis superficialiter insidentia, globulosa, 150-185 μ diam., albido-carnea, poro minutissimo vix perspicuo, pariete ca. 10 μ crasso minute parenchymatice e cellulis 4-6 μ diam. contextu pilis longiusculis (usque 180 μ) hyalinis continuis obtusis 2,5-3 μ crassis flexuosis saepe coalitis obsessa; asci ovato-oblongi vel oblongi, octospori, sessiles, 90-120 \times 40-52, ad apicem incrassati; sporae conglobatae, oblongo-clavulatae, utrinque rotundatae, 3-septatae, non constrictae, cellulis duabus extimis semper multo minoribus, hyalinae, 33-40 \times 12-13.

Hab. in superficie stromatis *Phyllachorae* (Catacaumatis),

- Elmeri (Fungi) ad folia *Fici Minahassae* (Moraceae), Mt. Maquiling, Ins. Philipp. (C. F. BAKER).
6. *Calonectria Bambusae* (Hara) v. Höhn., Ann. Mycol. 17., 1919, p. 5551 119. — *Miyakeomyces* (n. gen.) *Bambusae* Hara, Sydow, Fungi exot. exsicc. n. 385.
- Hab.* parasitica in *Phyllachora Phyllostachydis* Hara (Fungi), in foliis *Phyllostachydis bambusoidis* (Graminaceae), Japonia.
7. *Calonectria pellucida* O. Rostrup, Dansk Botan. Arkiv, 2., 1916, 5552 n. 5, p. 8, fig. 7. — Peritheciis superficialibus, perfecte sphaericis, pellucido-albis v. hyalinis, 140-150 μ diam., pariete 15 μ crasso; ascis cylindraceutis, breviter pedicellatis, saepe curvatis, 160-165 \times 5; sporis monostichis, fusoidis, utrinque acutissimis, 3-5 septatis, quae vix in conspectum cadunt, instructis, guttulatis, 18-21 \times 3,7-4,3.
- Hab.* ad paleas *Dactylidis glomeratae* (Graminaceae), S. Gelsskov, Dania.
8. *Calonectria perpusilla* Sacc., Notae Mycol. XXIII p. 69 (Accad. Veneto-trent. 1917). — Peritheciis glumiculis, sparsis, perexiguis, superficialibus, subglobosis, dilute antrantiacis, 80-85 μ diam., udis 90-100 μ diam., vertice obtusis, senio saepe collabentibus; contextu celluloso tenni, dilute roseolo; ascis teretiusculis, brevissime stipitatis, primitus apice abrupte-tenuatis, 8-sporis, minutissime 2-foveolatis, 35-40 \times 7; paraphysibus bacillaribus spuris: sporidiis oblique monostichis fusoidis, diu continuis, demum 3-septatis, non constrictis, minute 2-4-guttulatis, rectis, hyalinis, 10-12 \times 2,4.
- Hab.* in glumis emortuis *Oryzae sativae* (Graminaceae), Los Baños, Ins. Philipp. — Socium adest *Myrothecium Oryzae*, quod cfr. suo loco.
9. *Calonectria nivalis* Schaffnit, Mycol. Centrbl. II (1913) p. 246, fig. 5554 1-2. — *Nectria graminicola* Bk. et Br., saltem p. p. — Peritheciis gregariis, subsuperficialibus, saepe caespitosis, globoso-conoideis, 100-300 \times 150-200, rubro-lateritiis vel rubro-salmoneis, excipulo tenui, subhyalino; ascis copiosis, oblongis vel clavulatis, 50-60 \times 8-10, paraphysibus paucis aequilongis intermixtis; sporidiis irregulariter distichis, fusoidis, saepe inaequilateris vel curvulis, utrinque rotundatis, dilute roseis, medio septatis (raro 2-septatis), 12,5-16 \times 2,5-3,5. — Status conidicus *Fusarium nivale* (Fr. p. p.) Ces. conidiis 14,5-2,5 \times 3-4, 1-6 (typice 3-) septatis. — Sclerotia brunneo-atra, globosa, 150-300 μ diam. — Chlamydosporae ovoideae, 11,5 \times 7,5, vel globosae, 6,5 μ diam., uni-raro bi-cellulares.

Hab. ad basim culmorum *Secales* aliorumque graminum (Graminaceae), nec non in *Trifolio* (Leguminosae). ex herbario Musaei berolinensi.

10. *Calonectria höhneliana* Jaap, Ann. Mycol. 14., 1916, p. 10. — 5555
 Peritheciis sparsis, sessilibus, plus v. minus globulosis, 150-300 μ diam., contextu flavo-rubello, serius brunneolo; ascis anguste clavatis, plerumque medio crassioribus, apice obtuse tenuatis, stipitatis, 60-85 \times 6-8, octosporis; sporidiis anguste tereti-fusoides, 17-24 \times 2-2,5, rectis, rarissime leviter curvis, 4-cellularibus, hyalinis, distichis; paraphysibus copiosis, filiformibus, 1 μ cr.

Hab. in cladodiis adhuc vivis *Rusci aculeati* (Liliaceae), pr. Castelnuovo, Dalmatiae. — Perithecia senio cyanescentia ad *Gibberellam* nutant: ex subiculo flavo-griseolo matricem obducente videntur oriri.

11. *Calonectria hibiscicola* P. Henn., Hedw. vol. 48. (1908) p. 105. — 5556
 Peritheciis in caespitulis pulvinatis, rotundatis, isabellinis, 1-2 mm. diam., erumpentibus, subglobosis, verruculosis, papillatis, hyalino-flavidulis, 180-200 μ diam.; ascis clavatis, obtusis, paraphysatis, 4-sporis, 60-70 \times 9-11; sporidiis oblique monostichis, ellipsoideis, saepe curvulis, obtusis, 3-septatis, hyalinis, 18-24 \times 5-7.

Hab. in cortice *Hibisci schizopetali* (Malvaceae); hort. botan. Goeldi, Pará, Brasilia (BAKER).

12. *Calonectria ambigua* Spegaz. — Syll. II p. 544 — var. *exappendi-* 5557
culata Spegaz., Rel. mycol. trop. etc., in l. c. Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 113. — Peritheciis subglobosis 250 μ diam. puberulis ostiolo umbilicato praeditis; ascis cylindraceis subclavatis, crasse tunicatis, 120-140 \times 12-16, paraphysatis, octosporis; sporis oblique distichis subfusoides utrinque acutatis, triseptatis, non constrictis, 36-40 \times 6-7, levibus hyalinis.

Hab. in foliis coriaceis vivis *Sapindaceae*, prope Apiaby, Brasilia (J. PUIGGARI).

13. *Calonectria erythrina* P. et H. Syd., Ann. Mycol. X, 1912, p. 81. — 5558
 Peritheciis superficialibus, solitariis v. in greges minutos caespitosis, subiculo nullo, globosis v. ovoideo-globosis, 200-300 μ diam., usque 350 μ alt., aurantio-coccineis, in senectute ad fuscum vergentibus, levibus v. minutissime tantum granulosis, ostiolo minuto pertusis, in sicco profunde collabescentibus; ascis cylindraceis v. cylindraceo-fusiformibus 50-75 \times 7-10, octosporis; sporidiis irregulariter distichis, oblongis v. subfusiformibus, rectis v. leniter inaequilateris, distincte 3-septatis, non constrictis, quaque cellula 1-gut-

tulata, apicibus obtusis, hyalinis, 14-18 \times 3,5-4,5.

Hab. in corticibus et ad lignum putridum, Hayoep, Borneo sud-or. (H. WINKLER).

14. *Calonectria codes* T. Pesch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5559
Peradeniya v. VII, P. II, 1920, p. 135. — Peritheciis sparsis, superficialibus globosis, 0,25 mm. diam., arescendo collabescentibus, subtranslucidis e flavo-citrinis flavo-aurantiacis, quandoque globosis, plerumque pilis albis rigidis 20-50 \times 5, acutatis incrustatis obsitis; ostiolo minuto parum conspicuo, poro 10 μ lato, periphysibus praedito; parietibus indistincte parenchymaticis, tritis guttulis oleosis ostendentibus; ascis clavatis apice subacutis, octosporis, 70 \times 12; paraphysibus nullis; sporidiis oblique monostichis, hyalinis fusoidis v. anguste ovoideis, inaequilateris, 5-7 septatis, 18-29 \times 5-6.

Hab. ad ramos dejectos, Peradeniya, Ceylon, Asia. — Peritheciis primum astomis et aggregatis ut ovos insectorum ludentibus.

BRESADOLELLA v. Höhn. — Syll. XVIII p. 797.

1. *Bresadolella nigra* T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5560
Peradeniya v. VII, P. II, 1920, p. 130. — Peritheciis nigris sparsis, in stromate compacto late effuso albo v. brunnescenti 0,15 mm. cr. insidentibus, globosis 66-100 μ diam. v. depresso-globosis et 100 μ diam. 70 μ altis; parietibus parenchymaticis, fuscis, setis conicis 34 μ long, basi 7 μ cr. apice acutis, sparsis, nigro-brunneis gerentibus; ostiolo obtuso v. leniter papillato; ascis cylindraceis 30-34 \times 3, dein clavatis et 6 μ latis, 8-16-sporis; sporidiis ovoideis 1-septatis septo constrictis, utrinque obtusis 5 \times 2,5, articulis in asco separabilibus 2-3 μ diam., plerumque distichis.

Hab. verisimiliter parasitica ad perithecia Hypocreæ (Fungi) ejusdem, Hakgala Ceylon, Asia.

BOYDIA A. Lorr. Smith, Trans. Brit. Mycol. Soc. t. VI, P. II, 1918, p. 151. — Perithecia nigro-brunnea, submersa, globoso-lenticularia, ostiolo breviter papillato pertusa. Asci elongato-clavati, octospori aparaphysati; sporidia elongata, curvula utrinque clavata, medio sensim attenuata, 1-septata, hyalina.

1. *Boydia remuliformis* A. Lorr. Smith, l. c., p. 151, fig. 1. — Peritheciis 5561
solitariis, numerosis, cortice subvelatis, nigro-brunneis; contextu tenuiter membranaceo, ca. 400 μ diam.; ascis oblongis, ca. 155 μ long., 25 μ lat., apice rotundatis, basi leniter attenuatis, sporis elongatis ca. 100 μ long. in medio 3-4 μ , apicem versus 7-8 μ lat.

Hab. in caulibus emortuis *Ilicis angustifoliae* (Aquifoliaceae), West Kilbride, Ayrshire, Anglia (D. A. BOYD).

PARANECTRIA Sacc. — Syll. II p. 552, IX p. 987, XVII p. 812, XXII p. 491.

1. *Paranectria luxurians* Rehm, Ascom. Philippin. VII, in Leafst. of 5562 Philippin. Bot. VIII, 1916, p. 2924. — Perithecia in mycelio *Meliolae Macsae* parasitica, dispersa, sessilia, ovata vel elongato-ovalia, dilute flavescentia, primitus glabra, postremo pilis dispersis, subcurvatis, obtusis, septatis, hyalinis, 50×4 obsessa, 120-130 μ alta, 80-100 μ lata, poro minutissimo aperta, tenerrime pseudoparenchymatice contexta, ad basim hyphis hyalinis, 4 μ latis, *Meliolae* affixa eamque saepe plane obtegentia; ascis clavatis, 50×10 , 8-sporis, J — Sporibus bacillaribus vel acicularibus, rectis, 5-7-septatis, hyalinis, 30-40 \times 2, parallelis. Paraphysibus nullis.

Hab. ad *Meliolam Macsae* (Fungi), Los Baños, Ins. Philipp. (C. F. BAKER, ELADIO SABLÁN) ad *Meliolam Panicum* (C. F. BAKER).

2. *Paranectria meliolicola* F. L. Stevens, Botan. Gazette, 65., 1918, p. 5563 232, fig. 3. — Mycelium hyalinum ex hyphis 5 μ cr. efformatum, peritheciis copiosis, 75-120 μ diam. e rubris pallidis parce setulosis, 15-30-50 μ long.; ascis e clavatis ovatis, obtusis, 8-sporis tenuiter tunicatis, 45-55 \times 25-40; sporidiis hyalinis e oblongis oblongo-ellipsoideis, v. uno apice rectis altero curvatis, 3-septatis, corpo 22, 30 \times 7-10, apicibus 8 \times 2.

Hab. parasitica in *Meliola tortuosa* (Fungi) in *Pipere umbellato* (Piperaceae), et in *M. glabroide* in *P. aduncum*, Porto Rico.

3. *Paranectria Miconiae* F. L. Stevens, Botan. Gazette 65., 1918, p. 5564 233, fig. 4. — Peritheciis globulosis, e griseis albis, 100-150 μ diam. basi pilosulis; pilis non septatis crasse tunicatis obtusis, longitudine dimidium perithecii aequantibus; ascis numerosis, e clavatis ovatis, obtusis tenuiter tunicatis, 60 \times 12-15; sporidiis fusoides medio fortiter inflatis apicem versus regulariter conoideis, 3-septatis, magnitudine, apicibus inclusis, 32 \times 7-8, in massa v. in asco leniter griseis; paraphysibus filiformibus brevibus.

Hab. parasitica in fungo *Microthyriaceo* in foliis *Miconiae* (Melastomataceae), Yabucoa, Porto Rico.

STEREOCREA Syd., Ann. Mycol. 15., 1917, p. 216. — Stromata erum-

penti-superficialia, composita, singula globosa vel subglobosa, saepe stipitiformiter contracta, plurima in stromate communi botryose insidentia, in sicco perdura, tota superficie fertilia. Perithecia omnino immersa. Asci octospori, aparaphysati. Sporae elongato-clavatae, transverse multiseptatae, flavidae.

1. **Stereocrea Schizostachyi** Syd., l. c. — Stromata singula globosa vel applanato-globosa 1-3,5 mm., plerumque 2,5-3,5 mm. diam., saepe ad basim plus minus longe stipitiformiter contracta, in stromate communi irregulari erumpenti-superficiali dense botryoseque insidentia et tuberculos magnos 1,5-4 cm. diam. formantia, perdura, intus extusque atro-olivacea; perithecia per totam stromatis superficiem dense aequaliterque distributa, omnino immersa, 200-280 μ longa, 130-160 μ lata, pluristicha, pariete 23-35 μ crasso, ex hyphis tenuissimis dense parallele dispositis fibrosis contextu flavido vel flavo-brunneo, ostiolo plano vix vel parum emergente; asci elongato-fusoidei, utrinque attenuati vel superne rotundati, 125-170 \times 13-17, octospori, aparaphysati; sporae 2-3-stichae, elongato-clavatae, superne rotundatae, basim versus sensim attenuatae et saepe acutae, melius flagellatae, transverse 8-12-septatae non constrictae, flavidae, 48-70 \times 7-8,5.

Hab. ad culmos *Schizostachyi acutiflori* (Graminaeae) et *Schiz.* sp., pr. Sorsogon (M. RAMOS), Bilivan (MC GREGOR), San Antonio (M. RAMOS), Alag River, Mindoro (E. D. MERRILL), in Ins. Philipp.

BROOMELLA Sacc. — Syll. II p. 557, IX p. 988, XI p. 364, XXII p. 492.

1. **Broomella Zeae** Rehm, Ascom. Philippin, VII in Leaflet of Philippin. Bot. VIII, 1916 p. 2923. — Perithecia in macula lata dilute rubidula, gregaria, innata, sparsa, mox lineariter, arcte congregata, globulosa, non papillulata, dilute roseola, 0,1 mm. lata, udae per rimas corticis emergentia, excipulo glabro parenchymatice tenuissime contexto, subhyalino; ascis fusiformibus, 50 \times 8, 8-sporis. Sporidiis fusiformibus, 1-demum 3-septatis, hyalinis, 12-14 \times 3-4, distichis. Paraphysibus mucosis.

Hab. ad emortuum calamum *Zeae maydis* (Graminaeae), Los Baños, Ins. Philipp. (M. B. RAIMUNDO).

GIBBERELLA Sacc. — Syll. II p. 552, IX p. 988, XI p. 363, XIV p. 649, XVI p. 599, XVII p. 813, XXII p. 492.

1. *Gibberella acerina* Massa, *Annali di Bot.* v. X, 1912, p. 423, tab. 5567 IV fig. 3. — Peritheciis obovatis, piriformibus, v. irregulariter subglobosis, majusculis, vertice papillatis, contextu fusco-violaceo confertissimis, caespitulos 2 mm. et ultra formantibus, subsuperficialibus, basi stromate celluloso purpureo-fusco carnoso insidentibus; ascis oblongo-clavatis, stipitatis octosporis, plerumque 80×18 ; sporidiis subdistichis rectis oblongo-fusoideis, obtusis, triseptatis septis constrictis, 24×7 , hyalinis; paraphysibus nullis.

Hab. in ramis corticatis *Aceris campestris* (Aceraceae), Vercelli, Italiae bor. (CESATI, 1842) — *G. pulicari* (Fr.) et *G. molicolae* (De Not.) affinis.

2. *Gibberella creberrima* Syd., *Enum. Philipp. Fungi* II, in Philipp. 5568 *Journ. of Sci.* VIII (1913) p. 493. — Peritheciis gregariis, saepe seriatim dispositis, superficialibus, caulem longe lateque obtegentibus, caespitoso-confluentibus et conerescentibus, coriaceo-submembranaceis, leniter verrucosis, ovoideis, demum apice cupuliformiter collapsis, basi contracta saepe subpedicellatis, atris, $150-275 \times 120-200$, papillatis, contextu parenchymatico pallide violaceo e cellularis $8-12 \mu$ diam. composito; ascis clavatis, sessilibus, $70-100 \times 12-20$, octosporis, indistincte paraphysatis; sporidiis oblique monostichis vel saepius distichis, ellipsoideo-oblongis, utrinque rotundatis, 3-septatis, ad septa non constrictis, hyalinis, guttulatis, $18-22 \times 7-9$.

Hab. in caulibus vivis *Scleriae* sp. (Cyperaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER).

3. *Gibberella longispora* A. Maublanc, *Bull. Soc. Mycol. de Fr.*, XXXVI, 5569 1920, p. 37, tab. III fig. 9-13. — Maculis diffusis, castaneis. Stromatibus minutis (circ. 0,5 mm. diam.), gregariis, et secundum lineas longitudinales dispositis, erumpentibus superficialibusque, rugulosis, coriaceis, intus pallidis, cortice atro-purpurea praeditis, contextu celluloso. Peritheciis e stromatibus oriundis, demum subliberis, globosis, circ. 200μ diam., poro apicali non exserto praeditis, tunica $40-60 \mu$ crassa, cum stromatem confluyente; ascis fusoides-clavatis, mox diffluentibus, 60×15 , paraphysatis (?). Sporidiis in ascis fasciculatis, fusiformi-oblongis, rectis vel paulo curvulis, continuis, dein medio tenuissime 1-septatis, demum 2-3-septatis, utrinque obtusiusculis, sed mox in ascis apiculo brevi, obtuso, subapicali praeditis, hyalinis guttulatis granulosisque, $35-48 \times 4-4,5$. Stromatibus conidiiferis (*Fusarium*) inmixtis, erumpentibus, obscure purpureis, pulvinatis, cellulosis; sterigmatibus ad apicem cellula-

rum superficialium verticillatis, elongatis; conidiis acrogenis, primum rectis, dein praesertim ad apicem arcuatis et interdum fere hamatis, sursum acutiusculis, basi obtusis et subtruncatis, continuis, dein 2-3 tenuissime septatis, hyalinis, guttulatis, 40-50 \times 3.

Hab. in foliis *Olyrae* sp. (Graminaceae), Rio-de-Janeiro, Brasiliae.

4. *Gibberella briosiana* Turconi et Maffei, Rendic. Accad. Lincei, ser. 5570 5^a XXI (1912) p. 248 et in Atti Ist. Bot. Pavia XV p. 148, tab. V fig. 9-17 (extr. 1912).— Peritheciis rariter binis aut paucis, plerumque compluribus, botryose aggregatis atque in acervulos erumpentes verruciformes congestis, ovatis vel ovato-globosis, 200-250 μ diam., contextu celluloso parenchymatico atro-cyaneo, hypostromate quoque parenchymatico caerulescente insidentibus; ascis cylindraceis vel cylindraneo-subclavatis, breve pedicellatis, 80-100 \times 18-20, octosporis, aparaphysatis; sporidiis distichis, obovatis vel ellipsoideis, triseptatis, ad septa non vel leniter constrictis, 16-20 \times 6-8, hyalinis. — Adest status conidicus formam *Fusarii* sistens; sporodochiis mox erumpentibus, pulvinatis, rotundatis vel ellipsoideis, vel etiam sublinearibus, quandoque in series longitudinales 1-2 cm. longas confluentibus, pallide carneis; conidiophoris verticillatim ramosis; conidiis acrogenis, fusoides, curvatis, utrinque acutatis, plerumque 3-5-rarius 6-septatis, hyalinis, 40-60 \times 4-6.

Hab. in ramulis *Sophorae japonicae* (Leguminosae), euinoxium, in horto botan. Ticinensi, Italia bor.

5. *Gibberella pulicaris* Rick.— Sacc., Syll. II p. 552 — var. *subtropica* 5571 Rehm in Theissen, Ann. Mycol. IX, 1911, p. 63.— Peritheciis 215-260 \times 175-190; ascis clavatis 58-72 \times 12-13; sporis quadrilocularibus demum septo constrictis, 20-26 \times 5-5,5; conidiis curvulis, 5-7 septatis, 42-55 \times 5.

Hab. in ramulis putrescentibus, Rio Grande do Sul, Brasiliae.

6. *Gibberella rugosa* T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII, P. II, 1920, p. 136.— Peritheciis solitariis v. usque 6 aggregatis, erumpentibus stromate superficiali destitutis, basi quandoque mycelio albido tenui praeditis, minutis 0,15 mm. diam., ovoideis v. clavatis, rugoso verrucosis, nigris v. coeruleis, parietibus obscure violaceis, ostiolo non prominenti; ascis ovato-clavatis, octosporis 64-72 \times 14-18; sporidiis distichis e anguste-ovoideis subcymbiformibus, 3-septatis septo non constrictis, utrinque rotundatis, hyalinis, 18-24 \times 6-8 raro 32 \times 8.

Hab. ad ramos dejectos, Peradeniya, Ceylon, Asia.

Sect. 7. Hyalodictyae

PLEONECTRIA Sacc. — Syll. II p. 559, IX p. 990, XVII p. 814, XXII p. 493.

1. *Pleonectria heveana* Sacc., Notae Mycol. XXIV p. 13 (Bull. Orto bot. Napoli 1918). — Peritheciis gregariis v. subsparsis v. paucis acervulatis, superficialibus, globulosis, circ. $\frac{1}{4}$ mm. diam., mox collabescendo umbilicato-scutellatis, fusco-sanguineis, contextu parenchymatico, rubescenti; ascis crasse clavatis, apice obtuse tenuatis, infra sensim brevissime stipitatis, aparaphysatis, $65-70 \times 12$, octosporis; sporidiis ovato-oblongis, 3-5-septato-muriformibus. $17-18 \times 8$, hyalinis, ad septa non v. vix constrictis.

Hab. in cortice truncorum putrescenti *Heveae brasiliensis* (Euphorbiaceae) cultae, Singapore (BAKER). — Ab affini *Pleon. berolinensi* differt ascis clavatis, sporidiis distichis, 2-5-septato-muralibus.

2. *Pleonectria appendiculata* Vonaux, Bull. Soc. Mycol. de Fr., 1912, p. 5574-193. — Peritheciis numerosis, sparsis, superficialibus, pallide aurantiacis, sphaeroideis v. ovoideis supra obtuse conoideis, $125-150 \mu$ lat. $150-300 \mu$ altis, ostiolo simplici saturatius colorato, contextu plectenchymatico prosenchymatico ex hyphis $3-6 \mu$ cr. formato; ascis cylindraceis breviter pedunculatis, octosporis, saepe etiam esasporis, v. tetrasporis, $68-140 \times 13-17$; paraphysibus valde irregularibus mox evanidis, roseolis; sporis monostichis, irregularibus hyalinis primum 1-dein 3-septatis denumque septo longitudinali plus minus evoluto praeditis; ad septa constrictis, ovoideis v. late fusoides, rectis v. curvulis, multiguttulatis, $20-23 \times 9-12$, utrinque appendice filiformi recta v. curvula, $4-12 \times 1$, post maturitatem evanida donatis.

Hab. in thallo tenui ignoto ad truncos vetustos *Quercinos* prope Docelles Vosges, Gallia (HARMAND). — *Paranectriae affinis* (Desm.) Sacc. proxima.

3. *Pleonectria riograndensis* Theissen, Ann. Mycol. IX, 1911, p. 64, tab. 5575 V fig. 30, 31, VI fig. 53. — Peritheciis discretis, gregariis, prurumpentibus, globosis, asperulis, rubris, $420-480 \mu$ diam. primo papilla rotundata praeditis, dein umbilicatis, collabescens; ascis juvenilibus elongatis tenuibus, maturescentibus clavatis, plus minusve pedicellatis, p. sp. 75×25 , sporis oblique dispositis, pedicello tenui, $30-40 \mu$ longo, abrupte in clavam dilatato, vel magis aequaliter elongatis usque 100×16 , sporis recte distichis et tunc fere

sessilibus; sporis ellipsoideis, utrinque obtusissime rotundatis, hyalino-viridulis, muriformibus, septis tamen indistinctis, 24-30 \times 10-13.

Hab. in cortice cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasiliae (RICK).

MEGALONECTRIA Speg. — Syll. V p. 560, IX p. 992, XVI p. 599. XVII p. 815, XXII p. 495.

1. *Megalonectria pseudotrichia* (Schw.) Speg. — Syll. Fung. II p. 660. — 5576
var. *oligospora* Sacc., Philipp. Journ. of Sc, Manila, P. I, 1921, p. 599. — Asci tetrasporis, 90-105 \times 18; sporidiis 30-35 \times 12, cribroso-6- ad 7-septatis, dilutissime fuscis.

Hab. in cortice indetermin., Cina.

Sect. 8. *Scolecosporae*

OPHIONECTRIA Sacc. — Syll. II p. 563, IX p. 994, XI p. 365, XIV p. 651, XVI p. 601, XVII p. 815, XXII p. 497.

1. *Ophionectria lagunensis* Sydow, Ann. Mycol., 18., 1920, p. 100. — 5577
Mycelium superficiale ex hyphis longiusculis simplicibus septatis dilutissime fuscidulis 4-5 μ crassis compositum; perithecia in mycelio superficialia, basi hyphulis mycelii circumdata ibidemque hyphulis aliis dilutissime fuscidulis vel subhyalinis obtusis brevioribus laxè obsita, ceterum glabra, levia, plus minus dense gregaria, ovato-globosa, usque 350 μ alta, 240-280 μ lata, pallide ochracea, in sicco obscuriora, vertice obtusa, non ostiolata, contextu tenui e cellulis 12-16 μ diam. composito; asci tereti, brevissime stipitati, 100-130 \times 16-18, ad apicem obtusi, 8-spори; sporae fusoido-aciculares, utrinque acutiusculae, hyalinae, 6-10-septatae, 45-60 \times 2-3.

Hab. in ramis emortuis *Homonoyae ripariae* (Euphorbiaceae), Mt. Maquiling, Laguna, Ins. Philippin. (O. D. REINKING).

2. *Ophionectria erinacea* Rehm, Ascomyc. Philipp. I in Philipp. Journ. of Sci VIII (1913) p. 182. — Peritheciis in maculis epiphyllis vix conspicuis latissime flavidulis botryose 3-10 arcte congregatis sessilibus, globulosis, 100 μ latis, hyalinis, parenchymatice contextis setis plurimis, rectis, subacutatis, non septatis, glabris, crasse tunicatis medio canaliculatis, 50-100 \times 5-6, inprimis ad apicem obsessis; ascis cylindraceo-clavatis, apice rotundatis, sessilibus, crasse tunicatis, octosporis, usque ad 100 \times 12; sporidiis subacicularibus, utrinque valde acutatis, subcurvatis, hyalinis, 10-12-cellularibus, usque ad 70 \times 3, parallele positis; paraphysibus filiformibus ad api-

cem ramosulis, hyalinis, $1,5\ \mu$ crassis.

Hab. in foliis vivis *Bambusae Blumeanae* (Graminaeae), Luzon, prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

3. *Ophionectria Palmarum* Torrend, Champ. Congo belge, in Bull. Jard. Bot. Bruxelles IV, 1 (1913) p. 8. — Peritheciis gregariis, sessilibus, globulosis, ochraceis vel flavido-melleis, $200\ \mu$ diam., ad maturitatem aureo-furfuraceis; ascis fusoides, $50-70 \times 16$, indistincte paraphysatis; sporidiis lineari-fusoides, longitudinaliter parallelis vel subdistichis, $40-45 \times 4-5$, extra ascum saepius curvulis, 4-5-septatis, hyalino-viridescentibus.

Hab. ad folia et fragmenta *Palmarum*, Kisantu, Congo (H. VANDERYST).

TRICHONECTRIA Kirschst. — Syll. XXII p. 498.

1. *Trichonectria bambusicola* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2226. — Peritheciis in hypophyllo dilute flavido-maculato caespitose 6-8 arcte congregatis, globulosis, haud perspicue ostiolatis, hyalino-roseolis, $100\ \mu$ diam., parenchymatice tenuiter ex cellulis $9\ \mu$ circ. latis contextis, setis plurimis rectis, obtusis, hyalinis, non septatis, $90\ \mu$ usque longis, $9\ \mu$ cr. obsessis; ascis cylindraceis, apice rotundatis, $100-120 \times 12$; paraphysibus ramosis $1\ \mu$ circ. crassis; sporidiis acicularibus, apice superiore obtusis, rectis, hyalinis, 5-7-septatis, parallele dispositis, 80×2 .

Hab. in foliis *Bambusae Blumeanae* (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

TRAILIA Sutherland, Trans. Brit. Myc. Soc. V pt. I, 1914, p. 149 (1915). —

Stroma nullum. Perithecia simplicia, matrice immersa, mollia, alba vel pallida, ostiolo longissimo, anguste cylindraceo, recto vel curvato instructa. Asci cylindracei octospori paraphysati. Sporidia hyalina, filiformia, fastigata, septata, inasco duplicata contortaque.

1. *Trailia Ascophylli* Sutherl., l. cit., tab. 3 fig. II. — Mycelio hyalino; peritheciis confertis vel sparsis, thallo regionibus inaequaliter atris factis immersis, subglobosis v. clavatis, $50-60\ \mu$ diam., mollibus, albis, ostiolo longissimo, angusto, recto v. curvato, $300-450 \times 7,5-10,5$; ascis cylindraceis, contortis, octosporis, $45-50 \times 9$, paraphysatis; sporidiis hyalinis, filiformibus, in exilitatem fastigatis, septatis, ascum duplo longioribus et igitur inasco duplicatis contortisque.

Hab. in thallo *Ascophylli nodosi* (Algae), Orkney, Scotia.

OOMYCES B. et Br. — Syll. II p. 564, XVI p. 606, XXII p. 501.

1. *Oomyces caespitosus* Syd., Ann. Mycol. 14., 1916, p. 86. — *Stroma-* 5582
tibus dense caespitosus et greges 1-2,5 cm. longos culmum ambientes
formantibus, oblongis, erectis, usque 1 $\frac{1}{4}$ mm. longis, apice pa-
rum attenuatis, ochraceo-flavis vel obscure ochraceo-flavis, carno-
sis, perithecium unicum elongatum includentibus; ascis cylindra-
ceis, apophysatis, apice obtusis et hyalino-calyptatis, 350-400 \times
18-30, 6-8-sporis, sporidiis filiformibus, rectis vel flexuosis, 30-45-
septatis, non constrictis, hyalinis, utrinque obtusis, 250-350 \times 4,5-
6,5, loculis non secedentibus.

Hab. in culmis *Gaduae Weberbaueri* (Graminaceae), Se-
ringal, Auristella, Rio Acre, Peruvia.

TORRUBIELLA Bond. — Syll. IX p. 994, XI p. 365, XVII p. 816, XXII
p. 502.

1. *Torrubiella tomentosa* Pat. — Syll. XI p. 365. — var. *citrina* Pat., 5583
Bull. Soc. Mycol. de Fr., 1913, p. 226. — A typo differt colore ci-
trino et peritheciis forma ovoidea donatis.

Hab. ad *Coccidas* in foliis dejectis *Bambusa* (Graminaceae),
Chi Né Tonkin, Cinae (DUPORT).

MICRONECTRIA Speg. — Syll. IX p. 996, XVI p. 602.

1. *Micronectria montenegrina* Bubák, III Beitr. Pilz. Montenegro, in 5584
Botanikai Közlemények, 1915 (p. 53). — Peritheciis cortici immer-
sis, eum et epidermidem pustuliformiter elevantibus, dein apice glo-
boso-conico, furfuraceo erumpentibus, applanato-conicis, ca. 0,5 mm.
in diam., contextu molli, basi tenni, subhyalino, apice crasso, extus
atro-viridi, intus viridi usque subhyalino, plectenchymatico; ascis
cylindraceis, usque 200 \times 8-10, crassiuscule tunicatis, apice rotun-
datis et parum incrassatis, basi breve pedicellatis, octosporis; spo-
ridiis filiformibus, usque 180 \times 1-1,25 septatis, hyalinis, paraphy-
sibus creberrimis, sporis similibus obvallatis.

Hab. ad caules emortuos *Euphorbiae tinctoriae* (Eu-
phorbiaceae), Njegusi, Montenegro.

2. *Micronectria Eugeniae* T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5585
Peradeniya v. VII P. II, 1920, p. 137. — Maculis flavis ostioli al-
bis signatis; peritheciis hypophyllis mesophyllo immersis, epider-
midem elevantibus sed non erumpentibus, sparsis, globosis, v. la-
teraliter ovoideis, supra conoideis 0,15 mm. diam.; parietibus cras-
sis flavis v. flavo-brunnescentibus demum prope ostiolas brunneo-

nigricantibus; ascis oblongo-clavatis apice truncatis breviter pedicellatis, octosporis, 120×12 , sulcatulis, paraphysibus linearibus apice quandoque inflatis obvallatis; sporidiis parallele fasciculatis, hyalinis linearibus apicibus truncatis, obscure septatis, $80-96 \times 2$.

Hab. in foliis *Eugeniae* sp. (Myrtaceae), Hakgala, Ceylon, Asia.

HYPOCRELLA Sacc. *) — Syll. II p. 579, IX p. 1002, XI p. 367, XIV p. 653, XVI p. 603, XVII p. 817, XXII p. 503.

1. *Hypocrella disjuncta* Seaver, Mycologia 12, 1920, p. 97. — Stromatibus tuberculatis basi leniter constrictis maturis pallide griseis; ascis apice capitatis ad medium inflatis; sporidiis juventute filiformibus sed mox inasco articulatis et disjunctis et tunc ascis apparenter polysporis. 5586

Hab. in foliis *Bignoniae unguis* (Bignoniaceae), Naguabo Porto Rico (J. R. JOHNSTON et J. A. STEVENSON).

2. *Hypocrella melaena* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 494. — Stromatibus hypophyllis, ad nervos evolutis, solitariis vel saepius aggregatis et confluentibus, magnis, rotundatis, pulvinatis, 2-8 mm. diam., confluyendo subinde etiam majoribus, lata basi sessilibus, quoad crassitudinem variabilibus, sive planis sive medio plus minusve convexis, levibus, glabris, aterrimis, opacis, intus albido-lignosis; peritheciis monostichis, omnino immersis, globoso-conicis, $150-225 \mu$ diam., in quoque stromate numerosissimis; ascis cylindraceis vel clavato-cylindraceis, apice rotundatis, deorsum pedicellatis, $120-145 \times 8-14$; sporidiis mox jam inasco in segmenta secedentibus, articulis $6-9 \times 1-1.5$, hyalinis. 5587

Hab. in foliis *Dillenia philippinensis* (Dilleniaceae), Luzon, Prov. Laguna, San Antonio, ins. Philipp. (RAMOS). — Species peculiaris, facile dignoscenda.

3. *Hypocrella caulium* (Berk. et Curt.) Pat., Bull. Soc. Mycol. Fr. 1914, p. 346. — Huc ducenda est *Hypocrella camerunensis* Henn. — Syll. XIV p. 654. — quae nil est nisi status evolutus *Corticii caulium* Berk. et Curt. — Syll. VI p. 612. 5588

Hab. in caulibus *Filicium* (Filices), Doungou et ad ramulos

*) Quoad genera *Hypocrella* et *Aschersonia* cfr. PETCH, The genera *Hypocrella* and *Aschersonia* a preliminary Note, in Ann. of R. Bot. Garden Peradeniya, Sept. 1914.

indefinitos, Lizanga, Congo, Africa trop., parasitice ut videtur Coccidearum.

4. *Hypocrella villis* Syd., Ann. Mycol. 15., 1917, p. 215. — Stromata 5589
epiphylla, sparsa rotundata, minuta, 0,5-1 mm. diam., flavida, leniter convexa, subicula membranaceo, albido cineta; perithecia ubique in stromate evoluta, numerosa, immersa, ostioli obscure rufosuccineis prominentibus; ascis tenuibus, cylindraceis, 4-5 μ crassis; sporae facillime jam in asco in segmenta oblonga vel oblongo-cylindracea, 5-6 μ longa 2 μ lata, hyalina secedentes.

Hab. in foliis *Schizostachyi* sp. (Graminaceae), Angat pr. Bulacan, Luzon, Ins. Philipp. (M. RAMOS).

5. *Hypocrella phyllophila* Theissen, Ann. Mycol. IX, 1911, p. 66, tab. 5590
V fig. 51, VI fig. 54. — Stromatibus 0,5-1 mm. diam. primo griseis, dein brunneis, nigrescentibus, amphigenis, plerumque hypophyllis, sessilibus, sphaeroideis v. latiore basi affixa hemisphaericis; superficie peritheciis maturis acute subprominentibus, colliculoso-scabris, intus faretis, albo-cremeis, duriusculis, pseudo-epidermide ex hyphis densius contextis formata brunnea, 40-50 μ cr.; peritheciis ovato-botuliformibus, usque ad 450 \times 200, parietibus in sectione rubro-brunneis; ascis cylindraceis v. e medio tumidulo in utrimque partem sensim attenuatis, 150-180 \times 8-10,5, operculo delicatissimo; sporis filiformibus, mox in articulos bacillares, utrinque rotundatos, 8 μ longos secedentibus.

Hab. in foliis *Myrtaeae*; Sao Leopoldo Rio Grande do Sul, Brasiliae (RICK). — Differt ab *H. ochracea* colore, insertione stromatum, articulisque sporarum minoribus.

6. *Hypocrella plana* Sydow, Engler' Botan. Jahrbüch., 54., 1916, p. 5591
257. — Stromatibus albis, dein ochraceo-flavidis, planis, tenuiter discoideis, singulis orbicularibus, 2-4 mm. diam., sed saepe confluyendo majoribus et irregularibus, ca. $\frac{1}{2}$ mm. tantum crassis, ostioli minutissimis flavo-brunneis vix visibilibus punctatis; peritheciis omnino immersis, ovoideis, minutis, ascis cylindraceis 5-7 μ latis, octosporis, aparaphysatis; sporidiis filiformibus, longitudine ascorum, extra ascos in articulos cylindraceos 6-8 \times 1-1,5 hyalinos secedentibus.

Hab. in foliis vivis *Piperis* sp. (Piperaceae), ad flum. April, Nova Guinea nord-or. Africae (LEDERMANN).

7. *Hypocrella libera* Syd., Ann. Mycol. 14., 1916, p. 85. — Stromatibus 5592
in Coccidis parasiticis, lenticularibus vel irregularibus, sed haud globulosis, planiusculis, 2-6 mm. diam., hinc inde confluentibus,

ochraceis; peritheciis numerosis in quoque stromate et valde exsertis, fere omnino liberis elongatis, medio ventricosis, 0,5-1 mm. longis, in media parte $\frac{1}{3}$ - $\frac{1}{2}$ mm. crassis, ochraceis; ascis cylindraceis, apice obtusis, et hyalino-calyptatis, 300-350 \times 10-15, octosporis; sporidiis filiformibus, hyalinis, jam in asco in articulos numerosissimos oblongos vel oblongo-fusoideos utrinque leniter attenuatos, 13-17 μ longos 2-3 μ latos, secedentibus.

Hab. in Coccidiis (Insecta) ad folia dejecta, Cobija, Rio Acre Bolivia (E. ULE).

8. *Hypocrella ambiens* Theissen, Ann. Mycol. IX, 1911, p. 69, tab. V 5593 fig. 42, VII fig. 71. — Stromatibus tuberculatis, ramulum plus minusve ambientibus, pluribus arete aggregatis et fere connatis, 3-10 mm. diam., extus nigerrimis opacis, ob ostiola prominula dense dilateque asperulis et ob mammillas irregulariter hinc inde extantes crassius colliculosis, intus faretis albis, aetate vero lignicoloribus, plus minusve eroso-excavatis; peritheciis immersis botuliformibus, collo longiusculo, usque 350 μ long. (ipsâ perithecii cavitate ca. 240-280 \times 170-190), stratum pseudo-epidermale nigrum, 35-40 μ cr. perforantibus; ascis anguste cylindraceis 145-165 \times 6-7, operculo minutissimo hemisphaerico; sporis filiformibus, in asco in articulos 8-10,5 μ long., utrinque angustato-rotundatos secedentibus.

Hab. in ramis siccis, Rio Grande do Sul, Brasiliae.

9. *Hypocrella turbinata* (Berk.) Seaver, de qua cnfr. Cl. SEAVER in 5594 Mycologia 12., 1920, p. 96.
10. *Hypocrella sphaeroidea* Sydow, Engler' Botan. Jahrbüch. 54., 1916, 5595 p. 256. — Stromatibus globulosis vel applanato-globosis, 3-7 mm. diam., compactis, pulvinatis, sordide flavis, vel flavo-brunneis, superficie primitus leniter pulverulentis; ostioliis minutissimis, subaeris; peritheciis omnino immersis, ubique dense aequaliterque dispositis, globulosis, exiguis, 80-100 μ diam., collo minuto praeditis, usque 150 μ altis, distiche stipatis; ascis cylindraceis, 70-130 \times 9-12, apophysatis; sporidiis jam in asco in articulos oblongos utrinque obtusos continuos hyalinos 5-8 \times 2 secedentibus.
- Hab.* in ramulis plantae ignotae, « Felsspitze » Nova Guinea nord-or., Africae (LEDERMANN).
11. *Hypocrella insignis* Sydow, Engler' Botan. Jahrbüch. 54., 1916, p. 5596 256. — Stromatibus superficialibus,* sessilibus planis, discoideis, ambitu orbicularibus, 0,5-1,5 cm. diam., centro $\frac{3}{4}$ -1 mm. crassis, marginem versus $\frac{1}{2}$ mm. tantum crassis, vivide cinabarinis, subtus luteo-ochraceis, areola minuta centrali 1-2 mm. lata matrici affixis,

carnosis, intus pallidis; peritheciis ubique plus minus aequaliter distributis, densiuscule stipatis, globulosis vel irregularibus, basi 200-400 μ diam., superne in collum breve attenuatis; ostioliis minutissimis, exiguis, non vel vix prominentibus, subatis; ascis cylindraceis, ad apicem rotundatis, 140-200 \times 10-15, octosporis, apapophysatis; sporidiis filiformibus, ascum longitudine aequantibus, in eodem asco mox in articulos cylindraceos 5-8 μ longos, 1,5 latos secedentibus; conidiis simul praesentibus acicularibus, continuis, utrinque acutis, hyalinis, 9-11 \times 1; basidiis dense stipatis, hyalinis, 10-16 \times 1.

Hab. ad folium dejectum, Lordberg, Etappenberg, Nova Guinea nord-or., Africae (LEDERMANN).

12. *Hypocrella aurea* Sydow, Engler' Botan. Jahrbüch. 54., 1916, p. 5597 256. — Stromatibus amphigenis, sparsis, irregulariter hemisphaericis usque globulosis, pulvinulatis, $\frac{3}{4}$ -2 mm. diam., saepe leniter lobulatis, vivide aureis; peritheciis ovatis, omnino immersis, minutis, ostioliis obscure rufis; ascis cylindraceis, 130-160 \times 9-12, apapophysatis; sporidiis jam in asco in articulos breviter cylindraceos, continuos, hyalinos, 4-7 μ longos 2 μ latos, secedentibus.

Hab. in foliis vivis fruticis cujusdam, « Felsspitze » Guinea nord-or., Africae (LEDERMANN).

13. *Hypocrella orbicularis* Sydow in Theissen, Ann. Mycol. IX, 1911, 5598 p. 67. — Ita vocanda est *Hypocrella globosa* Sydow (20 sept. 1907) nec Raciborski (9 jan. 1907).
14. *Hypocrella nutans* (Rick) Theissen, Ann. Mycol. IX, 1911, p. 67. — 5599 Ita vocanda est *Möllerella nutans* Rick.

HYPOCREOPHIS Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 118. — Stroma superficiale discoideo-scutellatum sessile v. stipitatum carnosum-subceraceum, lacticolor, peritheciis disco supero immersis ac dense constipatis, ostioliis vix prominulis, ascis linearibus apapophysatis 8-sporis, sporis linearibus pluriseptatis hyalinis, articulis non dissilientibus. — Est *Hypocrea* scolecospora.

1. *Hypocreophis guaranitica* Spegaz., l. c. cum icon. — Stromata super- 560 ficitalia extus sordide flavida, intus alba, orbicularia sessilia, 5-10 mm. diam., superne plana sed centro saepius eximie umbonato-mucronata, punctibus ostiolaribus obscurioribus confertis notata, inferne convexula glaberrima, margine rotundata integra; peritheciis minutis elliptico-subglobosis 200-250 \times 120-150, tunica tenuiter mem-

branacea vestiti, ochroleuci; asci apice subglandiformes, basi breviter tenuiterque attenuato-pedicellati, $200 \times 9-10$; sporae lineari-subclavulatae, parte media supera crassiore apiceque obtuse rotundata, infera sensim angustiore apiceque acuta, 7-15-septata, $60-100 \times 3-5$.

Hab. ad cortices dejectos putres *Tabebuia* sp. (Bignoniaceae), prope San Lorenzo, Paraguay, America austr. trop. (J. D. ANISITZ).

EPICHLÖE Tul. — Syll. II p. 578, IX p. 1001, XI p. 367, XIV p. 655, XVI p. 607, XXII p. 507.

1. *Epichloë warburgiana* Mag. — Syll. XI p. 367. — var. *Donacis* Rehm, 5601
Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2225. — Stromatibus cylindræis, apice obtusis, fusco-nigris, subangulosis, crustaceis, 0,5-2 cm. longis, 8 mm. latis, inflorescentiam ambientibus et destruentibus, intus albescentibus; peritheciis innatis, globulosis, ostiolo non emergente sed potius umbilicato, 20-30 μ lato praeditis, in stromate ex hyphis tortuosis, septatis, brunneis, 5 μ latis contexto nidulantibus; ascis cylindræis (interdum fusiformibus) apice rotundatis, aparaphysatis, $120 \times 10-12$; sporidiis filiformibus, septatis, hyalinis, parallele dispositis, asci longitudinis, jam in asco in cellulas cylindræas, 8-10 \times 2, plurimas dissolutis.

Hab. ad inflorescentiam *Donacis cannaeformis* (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. RAIMUNDO).

BALANSIA Speg. — Syll. IX p. 999, XI p. 366, XIV p. 656, XVI p. 607, XVII p. 821, XXII p. 509.

1. *Balansia Cyperi* C. W. Edgerton, Mycologia, 11., 1919, p. 260, tab. 5602
12. — In floribus evoluta, sclerotigena, sclerotiis stipitatis v. sessilibus 1-3 cm. long. demum nigris, induratis papillatis; conidiis e conidiophoris brevibus angustis confertis scleroticolis efformatis, rectis v. curvulis, longis, angustis, hyalinis, 15-30 \times 1-1,8; peritheciis ampullaeformibus collo elongato emergenti praeditis, 480-600 \times 120-200; ascis elongatis, angustatis, plerumque rectis sed quandoque etiam curvulis, 160-225 \times 7-10; sporis longis, angustis, hyalinis septatis, 100-200 \times 1,5-2.

Hab. in inflorescentis *Cyper*i virentis (Cyperaceae), St. Gabriel Louisiana, Amer. bor. (A. T. BELL et C. W. EDGERTON).

2. *Balansia nidificans* P. et H. Syd., Ann. Mycol. X, 1912, p. 81. — 5603

Stromatibus in spicis evolutis, spicis infectis 5-11 mm. long. 2-3 mm. cr. in massam sclerotioideam perduram atram trasmutatis; stromatibus hemisphaericis v. depresso-globosis, 0,5-1 mm. diam., subsessilibus v. basi contracta matriæ affixis, duris, atris, dense minuteque granuloso-tuberculatis; peritheciis immersis; ascis cylindræis ca. 100-150 μ long.; sporidiis ascorum longitudine, $\frac{3}{4}$ -1 μ cr., extra ascos facile in articulos 9-12 μ long. secedentibus.

Hab. in spicis Cyperaceae, inter Muarah Uja et Kundim baru, Borneo sud-or. (H. WINKLER). — Stromate minuto distincta species. Spicis infectis subproliferis.

3. **Balansia Andropogonis** Syd. et Butl., Ann. Mycol. IX, 1911, p. 395. — 5604

Stromatibus in inflorescentiis lignoso-fibroso-mutatis insidentibus, sparsis v. aggregatis, depresso-hemisphaericis v. subdiscoideis 1-2 mm. diam., sessilibus, extus atris, intus pallidis, duriusculis, levibus, vix sub lente valida minute denseque punctulatis; peritheciis obovatis, minutis, immaturis.

Hab. in inflorescentiis Andropogonis aciculati (Graminaceae), Forbesganj, Purnea, Bengalen, India or. (J. H. BURKILL).

4. **Balansia asperata** Massee, Bull. Bot. Gard. Kew, 1911, p. 225, fig. 5605

1-7. — Stromatibus stipitatis, hemisphaericis vel subglobosis, infra umbilicatis, asperatis, extus atris, 1 mm. diam.; stipite cylindrico, lignoso-carnosulo, duriusculo, extus atro, sub lente minute squamuloso, 2 mm. circ. longo; peritheciis in stromatis capitalis periphericis, densissime constipatis; ascis cylindræis, 100-200 \times 7-8, basi attenuatis; sporidiis filiformibus, longitudinem ascorum aequantibus, multiseptatis, hyalinis.

Hab. in inflorescentia Ichnanthi pallentis (Graminaceae), Mount Austin, Johor, Penins, Malacca (RIDLEY). — Affinis *B. Jungeri* P. Henn. sed in omnibus partibus minor.

5. **Balansia sessilis** Massee, Bull. Bot. Gard. Kew, 1911, p. 225, fig. 5606

8-10. — Stromatibus sessilibus, globulosis, subtus plus minusve angustatis, duris, extra atris et minutissime punctulatis, intus albidis, 1,5-2,5 mm. diam.; peritheciis in stromate periphericis, densissime constipatis, oblongo-ovatis; ascis cylindræis, 200-220 \times 10-12, tunica apice valde incrassata, basi leniter attenuatis, apophysatis; sporidiis filiformibus, longitudinem ascorum fere attingentibus, hyalinis, multiguttulatis dein multiseptatis.

Hab. in inflorescentia Ichnanthi sp. (Graminaceae), Johor: Batu Pahat in penins. Malaccense (RIDLEY).

6. **Balansia Trichloridis** Spæg., Mycet. Argent. VI, Anal. Mus. Nac. 5607

Buenos Aires XXIII (1912) p. 96. — Stromatibus discoideis, sessilibus, matrici vix incrassata leniterque infusata gregarie insidentibus, parvis, 1-3 mm. diam., planiusculis, non vel vix rugulosis, extus intusque atris, non nitidis, contextu opaco indistincto; loculis ellipsoideo-globosis, confertis, erectis, 200-250 \times 120-200, obsolete papillato ostiolatis; ascis cylindraceis, longissimis, 200 \times 6, apice rotundatis crasseque tunicatis, basi breviuscule graciliterque pedicellatis, aparaphysatis, octosporis; sporidiis filiformibus, utrinque acutiuscule rotundatis, rectis vel leniter flexuosis, non vel minute multiguttulatis, hyalinis, 120-150 \times 1.

Hab. in culmis vivis *Trichloridis mendocinae* (Graminaceae, circa Mendoza, Argentina. — Species *Plowrightiae* habitu simillima, sed ascorum sporarumque fabrica distinctissima nec quidem comparanda.

OPHIODOTHIS Sacc. — Syll. II p. 552, IX p. 1051, XIV p. 685, XVI, p. 632, XVII p. 859, XXII p. 442. — De hoc cnfr. Theiss. et Syd., Ann. Mycol., 13, 1915, p. 187.

1. *Ophiodontis Elymi* Gz. Frag., Fungi Hort. Madrit. p. 21 fig. 2 (1917). — 5608
Stromatibus superficialibus elongatis, usque ad 1 mm. long., nigris, loculis immersis 1-4 majusculis, 175-350 μ diam., parietibus mediis tenuibus, distincte papillatis, poro pertusis; ascis longe cylindraceis, stipulatis, apice rotundatis 140 \times 10, paraphysibus filiformibus; sporidiis fasciculatis filiformibus, rectis v. subflexuosis, ascos subaequantibus, parce septulatis, loculis majoribus pluriguttulatis, loculis inferioribus facile secedentibus.

Hab. in culmis siccis *Elymi philadelphiae* (Graminaceae), in Horto bot. Madrid, Hispaniae (A. CABELLERO). — Ab *Ophiodontide atro-maculanti* diversa.

2. *Ophiodontis Picramniae* Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5609
Buenos Aires XXIII (1912) p. 95. — Stromatibus parenchymate innatis, utrinque perspicuis, repando-angulatis, 1-3 mm. diam., utrinque planissimis, atris, glabris, opacis; loculis hypophyllis, 1-5 in quoque stromate, semilenticularibus, 120-150 μ diam., obsolete ostiolatis, contextu subcarbonaceo, opaco, indistincto; ascis obelavulatis, apice subtruncate-rotundatis crasseque tunicatis, basi brevissime pedicellatis, aparaphysatis, octosporis, 90-100 \times 14-16; sporidiis 2-3-stichis, rectis vel leniter inaequilateris, utrinque acutiusculis, continuis vel 4-5-blastis, 40-45 \times 4-5, primo tunica mucosa hyalina levi vestitis dein nudis.

Hab. in foliis vivis *Picramniae palo-amargo* (Simarubaceae), prope Puerto Leon, Misiones, Argentina.

CORDYCEPS Fr. *) — Syll. II p. 566, IX p. 998, XI p. 366, XIV p. 656, XVI p. 611, XVII p. 822, XXII p. 510.

1. **Cordyceps Puiggari** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. 5610
Cienc. Cordoba, t. 23., 1919, Extr. p. 116. — Stromata solitaria;
stipite subfiliformi praelongo, 30-60 mm., 0,5 mm. diam., simplice
recto v. leniter flexuoso, longitudinaliter rugoso-striato fusco-atro
opaco, spatio apicali capitulum duplo quadruplove longiore pallide
carneo-luteo terminato; capitulo aerogeno solitario eximie elliptico-
sublimoniformi parvo, 2-3 × 1,50-1,75 mm., laevissimo, carneo luteo;
peritheciis confertis, horizontali-radiantibus omnino immersis ostioliis
etiam plane imperspicuis, 800 × 100; ascis cylindraceis 250 × 6-8;
sporis filiformibus in articulis teretibus abbreviatis mox dilaben-
tibus, 5-10 × 1.

Hab. ad cadaver Alleculidei (*Lystrotychus* sp.), inter Bryo-
phytas ad truncos vetustos, prope Apiaby, Brasilia (J. PUIGGARÍ). —
C. australi Speg. et *C. thyrsoides* Moell. affinis.

2. **Cordyceps peltata** Wakefield, Kew Bull. 1916, n. 3, p. 74 c. ic. — 5611
Stromate stipitato, stipite ligno omnino immerso, capitulo supra
corticem emergente; capitulo peltato, pulvinato, primo pallido,
deinde rufo-brunneo, margine pallidiore 1-2 processibus sterilibus
conicis ad 1 mm. longis praedito, ostioliis obscurioribus v. le-
niter prominulis, punctato, 2-5 mm. v. e fusione 5-7 × 3-4 mm.;
stipite brevi pallido e mycelio larvam obtegente oriundo; perithe-
ciis immersis, circ. 0,25 mm. longis; ascis clavatis, longe stipitatis,
p. sporif. 100 × 10; sporidiis hyalinis bacillari-fusiformibus, utrin-
que acutis, multiseptatis, 72-91 × 3-3,5, saepe medio inflexis matu-
ritate in duos articulos secedentibus.

Hab. parasitica in larvis *Cryptorhynchi* sp. intra *Odiei*
truncum nidulantibus. — An potius ad *Hypocrellae* genus referenda
species?

3. **Cordyceps huberiana** P. Henn., Hedw., vol. 48 (1908) p. 105. — Stro- 5612
matibus longe stipitatis, clavula cylindracea, spiciformi, obtusa,
8-9 mm. longa, 1 mm. crassa, flavo-brunneola, stipitibus filiformi-
bus, teretibus, arcuato-flexuosis, rigidis, corneis, atris, levibus, ad

*) Cfr. LLOYD, Synops. of the Cordyc. of Australia, Cincinn. March 1915.

apicem brunneolis, ca. 4 cm. longis, 400-500 μ latis; peritheciis oblongis, omnino immersis; ascis cylindraceutis, apice rotundatis, 150-200 \times 5-6; sporidiis filiformibus pluriseptatis 2 μ crassis.

Hab. in thorace *Megaponerae* sp. (Formica), Amazonas. Parà. — *C. rhizomorphae* A. Möll. affinis.

4. *Cordyceps japonensis* Hara, Bot. Mag. Tokyo v. 28., 1914, n. 332, 5612 cum icon. — Stromatibus solitariis v. caespitosis, simplicibus, flexuosis, subcompressis, carnosiss, aurantiacis, 11,5-25 mm. alt. 1-1,5 mm. cr., apice oblongis v. ovoideo-sphaeroideis, rugosis et peritheciis prominulis dense tectis, 2-5 mm. diam.; peritheciis subimmersis, globosis, ostiolatis; ascis longe cylindraceutis v. clavatis, apice rotundatis, stipitatis, octosporis, 130-170 \times 5-6; sporis filiformibus, longissimis, pluries septatis, 1,5-2 μ cr., hyalinis.

Hab. ad Formicas varias, Kawaue-mura et Kakumuno-ga-hara Prov. Minq, Japonia.

5. *Cordyceps necator* Pat. et Har., Bull. Soc. Mycol. Fr. 1912, p. 283. — 5614 Clavula ovoidea, apice apiculata, flavescente, bullata, 1-1,5 mm. longa, 1 mm. lata, in stipitem concolorem, basi nigricantem 3-4 mill. longum, $\frac{1}{3}$ mill. latum, e rhizomorpha atra ad 3 cm. longa, $\frac{1}{2}$ mm. crassa, flexuosa, cadaveri formicarum quas enecat inserta nascentem, attenuata; absque ascis et sporis.

Hab. in Formicis emortuis, Guideko, Sassandra, Guineae gallicae, (A. CHEVALIER).

6. *Cordyceps Tricentri* Yasuda in Lloyd, Myc. Not. 41. p. 568 fig. 775- 5615 776 (1916). — Stipite tenui filiformi, 6 cm. longo, 1 mm. cr., capitulo fusoides, sublevi, 7 \times 1,5 mm. nutante stipiteque flavis; peritheciis non prominulis, ceteris notis *Cord. nutantis*.

Hab. in corpore insecti *Tricentri*, in Japonia (A. YASUDA). — Praecipue colore stipitis et capituli a *C. nutante* differt.

7. *Cordyceps Clavicipitis* Oertegren, Svensk Bot. Tidskr. X (1916) p. 53, 5616 et p. 55 fig. 1-3. — Diagnose p. 57: In sclerotis Clavicipitis purpureae parasitica; stromatibus nunc simul cum stromatibus Clavicipitis, nunc iis suppressis singularibus, numero saepius plurimis, e sclerotis nutriticibus prorumpentibus, non ramosis, subulatis, cum stipite 15,5-23, typice 21-22 mm. longis, 1,2-2 mm. latis parte sporifera stipite duplo longiore, maturis colore externo croceo, interno griseo vel pallide subflavo, juvenilibus colore externo albido, interno aurantiaco signatis; peritheciis maturis quasi superficialibus, re vera sub velamine tenui valde prominentibus, 325-375 μ longis, 150-185 μ latis, pariete quam textura stromatica firmiore,

e colore atro-griseo; ostiolis longe protractis, flavocinctis, sursum papillulis minutis praeditis; ascis fragilissimis, cylindraceis, tenuissimis, 150 μ longis, 2,5-3 μ latis, sursum galericula glandiformi ornatis, hyalinis; sporis 8-nis,asco parum brevioribus, valde tenuissimis, multiseptatis; paraphysibus raris certe inventis.

Hab. e sclerotio *Olavicipitis purpureae* ovariorum *Secalis cerealis*, in paroecia Gunnarskog provinciae suecanae Wermland collectis fungis ille fraticida in horto botanico Universitatis Stokholmiae in cultura prodiit.

ASCOPOLYPORUS A. Möell.— Syll. XVI p. 605, XVII p. 819.

1. *Ascopolyporus Puttemansii* P. Henn., Hedw. vol. 48 (1908) p. 6. — 5617

Stromatibus subgloboso-tuberosis vel unguato-polyporiformibus, basi discoidea adnatis, gelatinoso-carnosis, parte superiore convexa flavo-brunnea fuscidula sterili, inferiore fertili applanata, granuloso-ostiolata, 3-4 cm. diam.; peritheciis immersis, confertis, oblongo-cylindraceis, 1,5 mm. circ. longis; ascis cylindraceis, vertice obtuso-rotundatis, 4-sporis, 350-400 \times 11-12; sporidiis parallelis, cylindraceis, utrinque rotundatis, pluriseptatis, hyalinis, haud dilatantibus, 280-300 \times 4-5.

Hab. in culmis *Bambusae* (Graminaceae), Rio Grande, S. Paulo, Brasilia. — Ab *A. polyporoide* notis variis distinctus.

ACICULOSPORIUM Miyake, Bot. Mag. Tokyo n. 259 (1908), Stud. ub.

Pilz. Bamb. in Japan, in litt., VI, 1912 (Etym. *acicula* ob formam sporarum).— Stroma subcartilagineum, album, lanceolatum; stratum fructiferum laterale irregulariter erumpens, laete coloratum. Perithecia uniseriata, lageniformia, immersa, ostiolis emergentibus. Asci 8-spori aparaphysati; sporidia filiformia, hyalina, stratum conidiophorum immersum loculatum astomum, sporulis filiformibus. Mycelium perennans.— Forte teste OI. MIYAKE, cum gen. *Loculistroma* (Patters., Syll. XXII p. 493) imperfecte descripto congruit.

1. *Aciculosporium Take* Miyake, Bot. Magaz. Tokyo, n. 259 p. 305 (1908). 5618

Characteres generis. — Stromate cum matrice concreto, et vagina foliorum semitecto, 5-14 mm. long., 1,2-2 mm. diam., pseudoparenchymatico, cartilagineo, albo; peritheciis 375-520 μ alt., 100-125 μ lat. hyalinis; ascis longe cylindraceis 270-330 \times 5-6, octosporis; sporidiis filiformibus, 230-300 \times 1,5-2, intus minute granulosis, guttatisque, continuis. — Conidiophoris ramosis, tenuibus, 11-24 \times 1,5-1,8; conidiis filiformibus, rectis v. flexis, 35-55 \times 1,8-2 e hya-

lino roseis, demum 2-septatis.

Hab. in apice ramorum *Phyllostachydis bambusoidis* et *Ph. puberulae* (Graminaceae), Tokyo nec non in Sina austr. — Fungillus cladomanias generat.

HYALOSPHAERA F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 172 (Etym. a *hyalos* hyalinus et *sphaera*). — Perithecia hyalina et tunc colore sporarum ostendentia; asci paraphysati, sporidia colorata, 2-3 septata.

1. **Hyalosphaera Miconiae** F. L. Stevens, l. c. — Maculae indefinitae, rugoso-circulares supra e pallide flavae 3-10 mm. diam.; infra pallidae et mycelio coriario vestitae centro ob sporidia cinereo-griseae; mycelium ex hyphis 5 μ cr., septatis, ramosis, hyalinis efformatum. Peritheciis levibus, maturis e sphaeroideis ovoideis, hyalinis, translucentibus, juventute omnino clausis maturis apice apertis sed non ostiolatis, 80-100 μ diam., stromate v. subiculo destitutis, parietibus apice 4 μ cr., ascis e clavatis oblongis, obtusis tenuiter tunicatis, numerosis, 8-sporis, paraphysibus numerosis ascos superantibus tenuissimis 1 μ cr. obvallatis; sporidiis linearibus, 2-3 v. plerumque 3-septatis, e fumosis brunneis, 40-57 \times 5. 5619

Hab. in foliis *Miconiae laevigatae* (Melastomataceae), Arecibo, Utuado, Maricao, Aguas Buenas, Ponce, Yabucoa, in Porto Rico, America Centr.

BORINQUENIA F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 173 (Etym. a *Borinquen* antiquum nomen Portorici). — Perithecia carnosa v. membranacea, ostiolata rubescentia; asci fasciculati, basilares, paraphysati; sporidia linearia, septata, brunnea.

1. **Borinquenia Miconiae** F. L. Stevens, l. c. fig. 3. — Maculis nullis mycelio e coriario brunneo-superficiali; peritheciis copiosis, ovoideis, papillatis, hyalinis v. pseudo-parenchymaticis rugosis, praecipue ad basim, pilosis, pilis 180 \times 150 cr.; ascis numerosis cylindraceis 60-65 \times 7-8, obtusis, tenuiter tunicatis octosporis, paraphysibus numerosis filiformibus, 1-1,5 μ cr., ascos superantibus obvallatis; sporidiis linearibus fumosis, guttulatis obtusis, 55-65 \times 2-3 plerumque incurvatis, septis non visis. 5620

Hab. in foliis *Miconiae laevigatae* (Melastomataceae), Arecibo, Utuado, Costa Rica. — Sensu Saccardo ad Hypocr.-phaeoscoteosp. et tunc gen. *Konradia* affinis, sensu vero Lindau ad Hy-

pomycet. referendum et cum gen. *Globulina* et *Torrubiella* comparandum.

DEXTERIA F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 174 (Etym. a Cl. Dr. E. G. DEXTER cui dicatum). — Mycelium omnino v. fere superficiale; perithecium astomum, parietibus tenuissimis v. collabescentibus praeditum, maturum ascos ostendens. — Gen. *Oalonectriae* affinis sed habitu et parietibus perithecorum diversum.

1. **Dexteria pulchella** F. L. Stevens, l. c., fig. 4. — Mycelio hypophyllo, 5621 rubescenti, superficiale sparsum; maculis nullis; peritheciis 18-25 ascos continentibus, maturis translucidis, stratu myceliali circumdati; ascis e clavatis ovoideis v. ellipsoideis $50 \times 15-22$, octosporis, obtusis tenuiter tunicatis, paraphysibus nullis; sporidiis linearibus hyalinis 5-septatis, $35-42 \times 4-5$; pycnidiis conformibus sed latioribus et obscurioribus, $110-130 \mu$ diam.; conidiis linearibus, $17-21 \times 3$, 3-septatis.

Hab. in foliis *Paulliniae pinnatae* (Sapindaceae), Mayaguez, Porto Rico, Amer. Centr.